

04-375 514

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: September 22, 2004, 08:57:07 ; Search time 0.001 Seconds
(without alignments)
1856.070 Million cell updates/sec

Title: US-09-375-514B-22
Perfect score: 615
Sequence: 1 atggcgacgtgggagaaac.....ctggatgatgagctctgggc 615

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 83 seqs, 1509 residues

Total number of hits satisfying chosen parameters: 166

Minimum DB seq length: 10
Maximum DB seq length: 40

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 85 summaries

Database : rni22.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	36	5.9	36	1	US-07-936-421-15
2	33	5.4	33	1	US-07-936-421-5
3	28	4.6	28	1	US-07-936-421-8
4	23	3.7	23	1	US-07-936-421-4
5	22.4	3.6	24	1	US-08-480-994-11
6	22.4	3.6	24	1	US-08-616-844-11
7	22.4	3.6	24	1	US-08-599-654-11
8	22.4	3.6	24	1	US-08-485-573-11
9	22.4	3.6	24	1	US-08-944-868A-11
10	22.4	3.6	24	1	US-08-944-428A-11
11	22.4	3.6	24	1	US-08-925-743-11
12	22.4	3.6	24	1	US-08-944-496-11
13	22.4	3.6	24	1	US-08-925-767-11
14	22	3.6	22	1	US-07-936-421-6
15	22	3.6	22	1	US-09-136-080E-51
16	20	3.3	20	1	US-08-217-082A-3
17	20	3.3	20	1	US-08-405-702A-13
18	20	3.3	20	1	US-08-465-485A-3
19	20	3.3	20	1	US-09-080-285-3
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21	20	3.3	20	1	US-09-445-486-3
22	20	3.3	20	1	US-09-724-426-3
23	20	3.3	20	1	US-09-301-836-1
24	19	3.1	19	1	US-07-936-421-11
25	19	3.1	19	1	US-07-936-421-12
26	19	3.1	19	1	US-07-936-421-14
27	18.4	3.0	20	1	US-09-109-663-72
28	18	2.9	18	1	US-08-217-082A-17
29	18	2.9	18	1	US-08-465-485A-17
30	18	2.9	18	1	US-08-465-485A-24
31	18	2.9	18	1	US-09-080-285-17
32	18	2.9	18	1	US-09-080-285-24
33	18	2.9	18	1	US-09-249-730-218

Sequence 1, Appl	18	2.9	18	1	US-09-118-220-1	Sequence 1, Appl
Sequence 55, Appl	18	2.9	18	1	US-08-738-652-55	Sequence 55, Appl
Sequence 27, Appl	18	2.9	18	1	US-09-030-701-27	Sequence 27, Appl
Sequence 59, Appl	18	2.9	18	1	US-09-286-098-59	Sequence 59, Appl
Sequence 104, Appl	18	2.9	18	1	US-09-286-098-104	Sequence 104, Appl
Sequence 45, Appl	18	2.9	18	1	US-08-960-774-45	Sequence 45, Appl
Sequence 14, Appl	18	2.9	18	1	US-09-078-954-14	Sequence 14, Appl
Sequence 51, Appl	18	2.9	18	1	US-09-325-193A-51	Sequence 51, Appl
Sequence 17, Appl	18	2.9	18	1	US-09-724-426-17	Sequence 17, Appl
Sequence 24, Appl	18	2.9	18	1	US-09-724-426-24	Sequence 24, Appl
Sequence 53, Appl	18	2.9	18	1	US-09-191-170-53	Sequence 53, Appl
Sequence 45, Appl	18	2.9	18	1	US-09-136-080E-45	Sequence 45, Appl
Sequence 2, Appl	18	2.9	18	1	US-09-690-921-2	Sequence 2, Appl
Sequence 218, Appl	18	2.9	18	1	US-09-301-829A-2	Sequence 218, Appl
Sequence 45, Appl	18	2.9	18	1	US-09-337-619-45	Sequence 45, Appl
Sequence 60, Appl	18	2.9	18	1	US-09-082-649B-60	Sequence 60, Appl
Sequence 8, Appl	17	2.8	17	1	US-08-217-082A-8	Sequence 8, Appl
Sequence 9, Appl	17	2.8	17	1	US-08-217-082A-9	Sequence 9, Appl
Sequence 10, Appl	17	2.8	17	1	US-07-936-421-10	Sequence 10, Appl
Sequence 1, Appl	17	2.8	17	1	US-08-877-831-1	Sequence 1, Appl
Sequence 41, Appl	18	2.7	18	1	US-09-030-701-41	Sequence 41, Appl
Sequence 60, Appl	18	2.7	18	1	US-09-030-701-60	Sequence 60, Appl
Sequence 72, Appl	18	2.7	18	1	US-09-286-098-72	Sequence 72, Appl
Sequence 72, Appl	18	2.7	18	1	US-08-960-774-72	Sequence 72, Appl
Sequence 66, Appl	18	2.7	18	1	US-09-191-170-66	Sequence 66, Appl
Sequence 7, Appl	16	2.6	16	1	US-09-337-619-7	Sequence 7, Appl
Sequence 7436, Ap	17	2.5	17	1	US-07-936-421-7	Sequence 7436, Ap
Sequence 3243, Ap	17	2.5	17	1	US-08-584-040-7436	Sequence 3243, Ap
Sequence 15, Appl	36	2.2	36	1	US-09-371-772B-3243	Sequence 15, Appl
Sequence 9, Appl	13	2.1	13	1	US-07-936-421-15	Sequence 9, Appl
Sequence 5, Appl	13	2.1	13	1	US-07-936-421-9	Sequence 5, Appl
Sequence 6, Appl	13	2.1	13	1	US-09-216-584-5	Sequence 6, Appl
Sequence 8, Appl	13	2.1	13	1	US-09-216-584-6	Sequence 8, Appl
Sequence 9, Appl	13	2.1	13	1	US-09-216-584-8	Sequence 9, Appl
Sequence 10, Appl	13	2.1	13	1	US-09-216-584-9	Sequence 10, Appl
Sequence 11, Appl	13	2.1	13	1	US-09-216-584-10	Sequence 11, Appl
Sequence 12, Appl	13	2.1	13	1	US-09-216-584-11	Sequence 12, Appl
Sequence 13, Appl	13	2.1	13	1	US-09-216-584-12	Sequence 13, Appl
Sequence 13, Appl	14	2.1	14	1	US-09-855-159A-13	Sequence 13, Appl
Sequence 3, Appl	12	2.0	12	1	US-07-936-421-3	Sequence 3, Appl
Sequence 10, Appl	12	2.0	12	1	US-08-778-702-10	Sequence 10, Appl
Sequence 126, Appl	12	2.0	12	1	US-09-475-947A-126	Sequence 126, Appl
Sequence 126, Appl	11	1.8	11	1	US-07-936-421-13	Sequence 126, Appl
Sequence 38, Appl	12	1.8	12	1	US-09-475-947A-126	Sequence 38, Appl
Sequence 69, Appl	12	1.8	12	1	US-09-030-701-38	Sequence 69, Appl
Sequence 59, Appl	12	1.8	12	1	US-09-286-098-69	Sequence 59, Appl
Sequence 59, Appl	12	1.8	12	1	US-08-960-774-69	Sequence 59, Appl
Sequence 63, Appl	12	1.8	12	1	US-09-325-193A-59	Sequence 63, Appl
Sequence 69, Appl	12	1.8	12	1	US-08-191-170-63	Sequence 69, Appl
Sequence 69, Appl	12	1.8	12	1	US-09-337-619-69	Sequence 69, Appl

ALIGNMENTS

RESULT 1
US-07-936-421-15
; Sequence 15, Application US/07936421
; Patent No. 5750390
; GENERAL INFORMATION:
; APPLICANT: James D. Thompson
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED
; TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2
; TITLE OF INVENTION: GENE
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles

```

/ STATE: California
/ COUNTRY: USA
/ ZIP: 90017
/
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
/ SOFTWARE: WordPerfect (Version 5.1)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/07/936,421
/ FILING DATE: 19920826
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA: including application
/ PRIOR APPLICATION DATA: described below:
/ APPLICATION NUMBER:
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Warburg, Richard J.
/ REGISTRATION NUMBER: 32,327
/ REFERENCE/DOCKET NUMBER: 197/243
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (213) 489-1600
/ TELEFAX: (213) 955-0440
/ TELEX: 67-3510
/ INFORMATION FOR SEQ ID NO: 15:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 36
/ TYPE: NUCLEIC ACID
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/
/ US-07-936-421-15
/
/ Query Match 5.9%; Score 36; DB 1; Length 36;
/ Best Local Similarity 86.1%; Pred. No. 0.79;
/ Matches 31; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
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/ QY 539 ACCTGAACGGCACCTGCACACCTGGATCCAGGATA 574
/ DB 1 ACCUGAACGGCACCCUGCACACCCUGGACCCAGGAUA 36
/
/ RESULT 2
/ US-07-936-421-5
/ Sequence 5, Application US/07936421
/ Patent No. 5750390
/ GENERAL INFORMATION:
/ APPLICANT: James D. Thompson
/ APPLICANT: Kenneth G. Draper
/ TITLE OF INVENTION: METHOD AND REAGENT FOR
/ TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED
/ TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2
/ TITLE OF INVENTION: GENE
/ NUMBER OF SEQUENCES: 22
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Lyon & Lyon
/ STREET: 611 West Sixth Street
/ CITY: Los Angeles
/ STATE: California
/ COUNTRY: USA
/ ZIP: 90017
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
/ SOFTWARE: WordPerfect (Version 5.1)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/07/936,421
/ FILING DATE: 19920826
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA: including application
/ PRIOR APPLICATION DATA: described below:
/ APPLICATION NUMBER:
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Warburg, Richard J.
/ REGISTRATION NUMBER: 32,327
/ REFERENCE/DOCKET NUMBER: 197/243
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (213) 489-1600
/ TELEFAX: (213) 955-0440
/ TELEX: 67-3510
/ INFORMATION FOR SEQ ID NO: 8:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 28
/ TYPE: NUCLEIC ACID
/ STRANDEDNESS: single
/
/ none

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/ APPLICATION NUMBER:
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Warburg, Richard J.
/ REGISTRATION NUMBER: 32,327
/ REFERENCE/DOCKET NUMBER: 197/243
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (213) 489-1600
/ TELEFAX: (213) 955-0440
/ TELEX: 67-3510
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 33
/ TYPE: NUCLEIC ACID
/ STRANDEDNESS: single
/ TOPOLOGY: linear
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/ US-07-936-421-5
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/ Query Match 5.4%; Score 33; DB 1; Length 33;
/ Best Local Similarity 84.8%; Pred. No. 1.4;
/ Matches 28; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
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/ QY 134 CACCGGGCATTTCTCTCCAGCCCGGGGCACA 166
/ DB 1 CACCGGGCAUCUCUCCUCCAGCCCGGGGCACA 33
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/ RESULT 3
/ US-07-936-421-8
/ Sequence 8, Application US/07936421
/ Patent No. 5750390
/ GENERAL INFORMATION:
/ APPLICANT: James D. Thompson
/ APPLICANT: Kenneth G. Draper
/ TITLE OF INVENTION: METHOD AND REAGENT FOR
/ TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED
/ TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2
/ TITLE OF INVENTION: GENE
/ NUMBER OF SEQUENCES: 22
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Lyon & Lyon
/ STREET: 611 West Sixth Street
/ CITY: Los Angeles
/ STATE: California
/ COUNTRY: USA
/ ZIP: 90017
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
/ SOFTWARE: WordPerfect (Version 5.1)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/07/936,421
/ FILING DATE: 19920826
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA: including application
/ PRIOR APPLICATION DATA: described below:
/ APPLICATION NUMBER:
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Warburg, Richard J.
/ REGISTRATION NUMBER: 32,327
/ REFERENCE/DOCKET NUMBER: 197/243
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (213) 489-1600
/ TELEFAX: (213) 955-0440
/ TELEX: 67-3510
/ INFORMATION FOR SEQ ID NO: 8:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 28
/ TYPE: NUCLEIC ACID
/ STRANDEDNESS: single
/
/ none

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; TOPOLOGY: linear
US-07-936-421-8
Query Match 4.6%; Score 28; DB 1; Length 28;
Best Local Similarity 82.1%; Pred. No. 3.9;
Matches 23; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 271 COTGTGTCACCTGGCCCTCGGCAAG 298
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Db 1 CCGUGGUCACCGUGGCCCGGCAAG 28

RESULT 4
US-07-936-421-4
; Sequence 4, Application US/07936421
; Patent No. 5750390
; GENERAL INFORMATION:
; APPLICANT: James D. Thompson
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED
; TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2
; TITLE OF INVENTION: GENE
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90017
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/936,421
; FILING DATE: 19920826
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; PRIOR APPLICATION DATA: including application
; PRIOR APPLICATION DATA: described below:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 197/243
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 23
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
US-07-936-421-4
Query Match 3.7%; Score 23; DB 1; Length 23;
Best Local Similarity 87.0%; Pred. No. 10;
Matches 20; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 64 AAGCTGTCGACGAGGGGCTACGA 86
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Db 1 AAGCUGUCGACGAGGGGCUACGA 23

RESULT 5
US-08-480-994-11/c
; Sequence 11, Application US/08480994
; Patent No. 5849578
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR THE
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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; Patent No. 5834248
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480,994
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-033
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
US-08-480-994-11
Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GGACGGGCTGAAGTGGGGAGGAT 440
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Db 24 GGATGGGCTGAAGTGGGGAGGAT 1

RESULT 6
US-08-616-844-11/c
; Sequence 11, Application US/08616844
; Patent No. 5849578
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR THE
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/616,844
; FILING DATE: 15-MAR-1996
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/599,654
; FILING DATE: 09-FEB-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-053
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
; US-08-616-844-11

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Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 417 GGACGGGTGAAGTGGGGAGGAT 440
DB 24 GGATGGGTGAAGTGGGGAGGAT 1

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RESULT 7
US-08-599-654-11/c
; Sequence 11, Application US/08599654
; Patent No. 5882925
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/599,654
; FILING DATE: 09-FEB-1996
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:

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; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-041
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
; US-08-599-654-11

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Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 417 GGACGGGTGAAGTGGGGAGGAT 440
DB 24 GGATGGGTGAAGTGGGGAGGAT 1

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RESULT 8
US-08-485-573-11/c
; Sequence 11, Application US/08485573
; Patent No. 5968770
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,573
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-032
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)

```



```

; Sequence 11, Application US/08944423A
; Patent No. 6020463
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: WINDOWS 95
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/944,423A
; FILING DATE: 06-OCT-1997
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/599,654
; FILING DATE: 09-FEB-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: JUN-07-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-105
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
; US-08-944-423A-11

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 417 GGACGGGTGAACCTGGGGAGGAT 440
Db 24 GGATGGGTGAACCTGGGGAGGAT 1

RESULT 11
US-08-925-743-11/C
; Sequence 11, Application US/08925743
; Patent No. 6054558
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 417 GGACGGGTGAACCTGGGGAGGAT 440
Db 24 GGATGGGTGAACCTGGGGAGGAT 1

RESULT 10
US-08-944-423A-11/C
; Sequence 11, Application US/08944868A
; Patent No. 6018025
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/944,868A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/599,654
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-041
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
; US-08-944-868A-11

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 417 GGACGGGTGAACCTGGGGAGGAT 440
Db 24 GGATGGGTGAACCTGGGGAGGAT 1

RESULT 10
US-08-944-423A-11/C

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STATE: New York
COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925,743
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/485,573
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-032
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
TYPE: nucleic acid
STRADEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
US-08-925-743-11

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Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy 417 GCACGGGTGAACCTGGGGAGGAT 440
Db 24 GGATGGGTGAACCTGGGGAGGAT 1

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RESULT 12
US-08-944-496-11/c
Sequence 11, Application US/08944496
Patent No. 612433
GENERAL INFORMATION:
APPLICANT: FALB, DEAN A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESSEE: PENNIE & EDMONDS LLP
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/944,496
FILING DATE: 06-OCT-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/599,654
FILING DATE: 09-FEB-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/485,573
FILING DATE: 07-JUN-1995

```

```

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/386,844
FILING DATE: 10-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: CORUZZI, LAURA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-104
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
TYPE: nucleic acid
STRADEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic oligonucleotide"
HYPOTHETICAL: NO
US-08-944-496-11

```

```

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy 417 GCACGGGTGAACCTGGGGAGGAT 440
Db 24 GGATGGGTGAACCTGGGGAGGAT 1

```

```

RESULT 13
US-08-925-767-11/c
Sequence 11, Application US/08925767
Patent No. 6225084
GENERAL INFORMATION:
APPLICANT: FALB, DEAN A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
NUMBER OF SEQUENCES: 38
CORRESPONDENCE ADDRESS:
ADDRESSEE: PENNIE & EDMONDS
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925,767
FILING DATE: 09-SEPT-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/485,573
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/386,844
FILING DATE: 10-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-097
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs

```

TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
US-08-925-767-11

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GCACGGGTGAAGTGGGGAGGAT 440
DB 24 GCATGGGTGAAGTGGGGAGGAT 1

RESULT 14
US-07-936-421-6
Sequence 6, Application US/07936421
Patent No. 5750390
GENERAL INFORMATION:
APPLICANT: James D. Thompson
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TREATMENT OF DISEASES CAUSED
BY EXPRESSION OF THE BCL-2
GENE
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESS: Lyon & Lyon
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90017
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/936,421
FILING DATE: 19920826
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
including application
PRIOR APPLICATION DATA:
described below:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 197/243
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 22
TYPE: NUCLEIC ACID
STRANDEDNESS: single
TOPOLOGY: linear
US-07-936-421-6

Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 12;
Matches 20; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 198 CGCCAGGACCTGCGGCTGCAG 219
DB 1 CGCCAGGACCTGCGGCTGCAG 22

RESULT 15
US-09-136-080E-51
Sequence 51, Application US/09136080E
Patent No. 6518017
GENERAL INFORMATION:
APPLICANT: Riley, Timothy A.
APPLICANT: Brown, Bob D.
APPLICANT: Arnold, Lyle J.
TITLE OF INVENTION: COMBINATORIAL ANTISENSE LIBRARY
FILE REFERENCE: OASBIO.003A
CURRENT APPLICATION NUMBER: US/09/136,080E
CURRENT FILING DATE: 1998-08-18
NUMBER OF SEQ ID NOS: 54
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 51
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: synthetic oligonucleotide
US-09-136-080E-51

Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 264 GGTGCCACCTGTGTCACCTG 285
DB 1 GGTGCCACCTGTGTCACCTG 22

RESULT 16
US-08-217-082A-3/C
Sequence 3, Application US/08217082A
Patent No. 5734033
GENERAL INFORMATION:
APPLICANT: Reed, John
TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES FOR INHIBITING THE
GROWTH OF CELLS EXPRESSING THE HUMAN BCL-2 GENE
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
ADDRESSEE: P.C.
STREET: 224 Airport Parkway
CITY: San Jose
STATE: California
COUNTRY: U.S.A.
ZIP: 95110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/217,082A
FILING DATE: 24-MAR-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/840,716
FILING DATE: 21-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/288,692
FILING DATE: 22-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Fortney, Andrew D.
REGISTRATION NUMBER: 34,600
REFERENCE/DOCKET NUMBER: 3335-067-55 FWC
TELECOMMUNICATION INFORMATION:
TELEPHONE: (408) 436-2070
TELEFAX: (408) 436-2075
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:

TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
US-08-925-767-11

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 12;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GCACGGGTGAAGTGGGGAGGAT 440
DB 24 GCATGGGTGAAGTGGGGAGGAT 1

RESULT 14
US-07-936-421-6
Sequence 6, Application US/07936421
Patent No. 5750390
GENERAL INFORMATION:
APPLICANT: James D. Thompson
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TREATMENT OF DISEASES CAUSED
BY EXPRESSION OF THE BCL-2
GENE
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESS: Lyon & Lyon
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90017
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/936,421
FILING DATE: 19920826
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
including application
PRIOR APPLICATION DATA:
described below:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 197/243
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 22
TYPE: NUCLEIC ACID
STRANDEDNESS: single
TOPOLOGY: linear
US-07-936-421-6

Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 12;
Matches 20; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 198 CGCCAGGACCTGCGGCTGCAG 219
DB 1 CGCCAGGACCTGCGGCTGCAG 22

```

; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: Synthetic DNA
; ANTI-SENSE: YES
US-08-217-082A-3

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 577 GGAGGCTGGTAGTGTCATC 596
Db 20 GGAGGCTGGTAGTGTCATC 1

RESULT 17
US-08-405-702A-13
; Sequence 13, Application US/08405702A
; Patent No. 5789389
; GENERAL INFORMATION:
; APPLICANT: Tarasewicz, Dariusz G
; APPLICANT: Schott, Brigitte
; APPLICANT: Holzmayer, Tatiana A.
; APPLICANT: Roninson, Igor B
; TITLE OF INVENTION: BCL2 Derived Genetic Elements Associated
; with Sensitivity to Chemotherapeutic Drugs
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Banner & Witcoff, Ltd.
; STREET: 10 South Wacker Drive, Suite 3000
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/405,702A
; FILING DATE: 17-MAR-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5789389nan, Kevin E
; REGISTRATION NUMBER: 35,303
; REFERENCE/DOCKET NUMBER: 95,332
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-715-1000
; TELEFAX: 312-715-1234
; TELEX: 910-221-5317
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
US-08-405-702A-13

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 442 GTGGCTTCTTTGAGTTCGG 461
Db 1 GTGGCTTCTTTGAGTTCGG 20

RESULT 18

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```

US-08-465-485A-3/c
; Sequence 3, Application US/08465485A
; Patent No. 581066
; GENERAL INFORMATION:
; APPLICANT: Reed, John
; TITLE OF INVENTION: Regulation of bcl-2 Gene Expression
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,
; STREET: 1755 S. Jefferson Davis Hwy., Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,485A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,256
; FILING DATE: 20-SEP-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/840,716
; FILING DATE: 21-FEB-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/288,692
; FILING DATE: 22-DEC-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Fortney, Andrew D.
; REGISTRATION NUMBER: 34,600
; REFERENCE/DOCKET NUMBER: 3335-070-55 CONT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (408) 436-2070
; TELEFAX: (408) 436-2075
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; ANTI-SENSE: YES
US-08-465-485A-3

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 577 GGAGGCTGGTAGTGTCATC 596
Db 20 GGAGGCTGGTAGTGTCATC 1

RESULT 19
US-09-080-285-3/c
; Sequence 3, Application US/09080285
; Patent No. 6040181
; GENERAL INFORMATION:
; APPLICANT: Reed, John
; TITLE OF INVENTION: Regulation of bcl-2 Gene Expression
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,
; STREET: 1755 S. Jefferson Davis Hwy., Suite 400
; CITY: Arlington
; STATE: Virginia

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COUNTRY: U.S.A.
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/080,285
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/465,485
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/124,256
FILING DATE: 20-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/840,716
FILING DATE: 21-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/288,692
FILING DATE: 22-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Fortney, Andrew D.
REGISTRATION NUMBER: 34,600
REFERENCE/DOCKET NUMBER: 3335-070-55 CONT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (408) 436-2070
TELEFAX: (408) 436-2075
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
ANTI-SENSE: YES
US-09-080-285-3

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 577 GGAGCTGGGTAGGTGCATC 596
DB 20 GGAGCTGGGTAGGTGCATC 1

RESULT 20
US-09-445-486-1
Sequence 1, Application US/09445486
Patent No. 6291668
GENERAL INFORMATION:
APPLICANT: Ziegler, Annemarie
APPLICANT: Zangemeister-Wittke, Uwe
APPLICANT: Fabbro, Dorian
APPLICANT: Altmann, Karl-Heinz
TITLE OF INVENTION: Oligonucleotide derivatives
FILE REFERENCE: 4-30026/A
CURRENT APPLICATION NUMBER: US/09/445,486
CURRENT FILING DATE: 1999-12-07
PRIOR APPLICATION NUMBER: PCT/EP98/03362
PRIOR FILING DATE: 1998-06-05
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patent in Ver. 2.0
SEQ ID NO 1
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Derivative of SEQ ID NO:1
US-09-445-486-3

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 422 GGGTGAACCTGGGGAGGATT 441
DB 20 GGGTGAACCTGGGGAGGATT 1

RESULT 21
US-09-445-486-3/c
Sequence 3, Application US/09445486
Patent No. 6291668
GENERAL INFORMATION:
APPLICANT: Ziegler, Annemarie
APPLICANT: Zangemeister-Wittke, Uwe
APPLICANT: Fabbro, Dorian
APPLICANT: Altmann, Karl-Heinz
TITLE OF INVENTION: Oligonucleotide derivatives
FILE REFERENCE: 4-30026/A
CURRENT APPLICATION NUMBER: US/09/445,486
CURRENT FILING DATE: 1999-12-07
PRIOR APPLICATION NUMBER: PCT/EP98/03362
PRIOR FILING DATE: 1998-06-05
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patent in Ver. 2.0
SEQ ID NO 3
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Derivative of SEQ ID NO:1
US-09-445-486-3

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 422 GGGTGAACCTGGGGAGGATT 441
DB 20 GGGTGAACCTGGGGAGGATT 1

RESULT 22
US-09-724-426-3/c
Sequence 3, Application US/09724426
Patent No. 6414134
GENERAL INFORMATION:
APPLICANT: Reed, John
TITLE OF INVENTION: Regulation of BCL-2 Gene Expression
FILE REFERENCE: 10412-024
CURRENT APPLICATION NUMBER: US/09/724,426
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patent in version 3.0
SEQ ID NO 3
LENGTH: 20
TYPE: DNA
ORGANISM: Homo sapiens
OTHER INFORMATION: Derivative of SEQ ID NO:1
US-09-724-426-3

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 577 GGAGCTGGGTAGGTGCATC 596
DB 20 GGAGCTGGGTAGGTGCATC 1

COUNTRY: U.S.A.
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/080,285
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/465,485
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/124,256
FILING DATE: 20-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/840,716
FILING DATE: 21-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/288,692
FILING DATE: 22-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Fortney, Andrew D.
REGISTRATION NUMBER: 34,600
REFERENCE/DOCKET NUMBER: 3335-070-55 CONT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (408) 436-2070
TELEFAX: (408) 436-2075
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
ANTI-SENSE: YES
US-09-080-285-3

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 577 GGAGCTGGGTAGGTGCATC 596
DB 20 GGAGCTGGGTAGGTGCATC 1

RESULT 20
US-09-445-486-1
Sequence 1, Application US/09445486
Patent No. 6291668
GENERAL INFORMATION:
APPLICANT: Ziegler, Annemarie
APPLICANT: Zangemeister-Wittke, Uwe
APPLICANT: Fabbro, Dorian
APPLICANT: Altmann, Karl-Heinz
TITLE OF INVENTION: Oligonucleotide derivatives
FILE REFERENCE: 4-30026/A
CURRENT APPLICATION NUMBER: US/09/445,486
CURRENT FILING DATE: 1999-12-07
PRIOR APPLICATION NUMBER: PCT/EP98/03362
PRIOR FILING DATE: 1998-06-05
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patent in Ver. 2.0
SEQ ID NO 1
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Isolated polynucleotide
US-09-445-486-3

Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 378 GCGGGACGCTTTGCCAGC 396

Db 1 GCGGGACGCTTTGCCAGC 19

RESULT 26

US-07-936-421-14

Sequence 14, Application US/07936421

Patent No. 5750390

GENERAL INFORMATION:

APPLICANT: James D. Thompson

APPLICANT: Kenneth G. Draper

TITLE OF INVENTION: METHOD AND REAGENT FOR

TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED

TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2

TITLE OF INVENTION: GENE

NUMBER OF SEQUENCES: 22

CORRESPONDENCE ADDRESS:

ADDRESSEE: Lyon & Lyon

STREET: 611 West Sixth Street

CITY: Los Angeles

STATE: California

COUNTRY: USA

ZIP: 90017

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM Compatible

OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)

SOFTWARE: WordPerfect (Version 5.1)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/936,421

FILING DATE: 19920826

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA: including application

PRIOR APPLICATION DATA: described below:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Warburg, Richard J.

REGISTRATION NUMBER: 32,327

REFERENCE/DOCKET NUMBER: 197/243

TELECOMMUNICATION INFORMATION:

TELEPHONE: (213) 489-1600

TELEFAX: (213) 955-0440

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:

LENGTH: 19

TYPE: NUCLEIC ACID

STRANDEDNESS: single

TOPOLOGY: linear

US-07-936-421-14

Query Match 3.1%; Score 19; DB 1; Length 19;

Best Local Similarity 78.9%; Pred. No. 20;

Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 514 AACATCGCCCTGTGGATGA 532

Db 1 AACATCGCCCTGTGGATGA 19

RESULT 27

US-09-109-663-72/c

Sequence 72, Application US/09109663

Patent No. 6277981

GENERAL INFORMATION:

APPLICANT: Tu, Guang-Chou

APPLICANT: Israel, Yedy

TITLE OF INVENTION: AN IMPROVED METHOD FOR DESIGN AND SELECTION OF

TITLE OF INVENTION: EFFICACIOUS ANTISENSE OLIGONUCLEOTIDES

FILE REFERENCE: 9855-301

CURRENT APPLICATION NUMBER: US/09/109,663

CURRENT FILING DATE: 1998-07-03

EARLIER APPLICATION NUMBER: 60/051,705

EARLIER FILING DATE: 1997-07-03

NUMBER OF SEQ ID NOS: 81

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 72

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Known

OTHER INFORMATION: Effective ASO

US-09-109-663-72

Query Match 3.0%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 25;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGAAC 20

Db 20 ATGGCGCAGCTGGGAGAAC 1

RESULT 28

US-08-217-082A-17/c

Sequence 17, Application US/08217082A

Patent No. 5734033

GENERAL INFORMATION:

APPLICANT: Reed, John

TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES FOR INHIBITING THE

TITLE OF INVENTION: GROWTH OF CELLS EXPRESSING THE HUMAN BCL-2 GENE

NUMBER OF SEQUENCES: 17

CORRESPONDENCE ADDRESS:

ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT,

ADDRESSEE: P.C.

STREET: 224 Airport Parkway

CITY: San Jose

STATE: California

COUNTRY: U.S.A.

ZIP: 95110

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/217,082A

FILING DATE: 24-MAR-1994

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/840,716

FILING DATE: 21-FEB-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/288,692

FILING DATE: 22-DEC-1988

ATTORNEY/AGENT INFORMATION:

NAME: Fortney, Andrew D.

REGISTRATION NUMBER: 34,600

REFERENCE/DOCKET NUMBER: 3335-067-55 FWC

TELECOMMUNICATION INFORMATION:

TELEPHONE: (408) 436-2070

TELEFAX: (408) 436-2075

INFORMATION FOR SEQ ID NO: 17:

SEQUENCE CHARACTERISTICS:

LENGTH: 18 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid

DESCRIPTION: Synthetic DNA

STREET: 1755 S. Jefferson Davis Hwy., Suite 400
CITY: Arlington
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/080,285
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/465,485
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/124,256
FILING DATE: 20-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/840,716
FILING DATE: 21-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/288,692
FILING DATE: 22-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Fortney, Andrew D.
REGISTRATION NUMBER: 34,600
REFERENCE/DOCKET NUMBER: 3335-070-55 CONT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (408) 436-2070
TELEFAX: (408) 436-2075
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Other nucleic acid;
DESCRIPTION: Synthetic DNA
ANTI-SENSE: YES
FEATURE:
NAME/KEY: Modified_base
LOCATION: 16..17
OTHER INFORMATION: Last two internucleoside linkages are
US-09-080-285-17
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
Db 1a ATGGCGCACGCTGGGAGA 1
RESULT 32
US-09-080-285-24/c
Sequence 24, Application US/09080285
Patent No. 6040181
GENERAL INFORMATION:
APPLICANT: Reed, John
TITLE OF INVENTION: Regulation of bcl-2 Gene Expression
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSES: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
ADDRESSES: P.C.
STREET: 1755 S. Jefferson Davis Hwy., Suite 400
CITY: Arlington
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/080,285

FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/465,485
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/124,256
FILING DATE: 20-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/840,716
FILING DATE: 21-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/288,692
FILING DATE: 22-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Fortney, Andrew D.
REGISTRATION NUMBER: 34,600
REFERENCE/DOCKET NUMBER: 3335-070-55 CONT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (408) 436-2070
TELEFAX: (408) 436-2075
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Other nucleic acid;
DESCRIPTION: Synthetic DNA
ANTI-SENSE: YES
FEATURE:
NAME/KEY: Modified_base
LOCATION: 16..17
OTHER INFORMATION: Last two internucleoside linkages are
US-09-080-285-24
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
RESULT 33
US-09-249-730-218/c
Sequence 218, Application US/09249730
Patent No. 6121000
GENERAL INFORMATION:
APPLICANT: WRIGHT, Jim A.
APPLICANT: YOUNG, Aiping H.
TITLE OF INVENTION: Antitumor Antisense Sequences Directed Against R1 and
TITLE OF INVENTION: R2 Components of Ribonucleotide Reductase
FILE REFERENCE: 032396-040
CURRENT APPLICATION NUMBER: US/09/249,730
CURRENT FILING DATE: 1999-02-11
NUMBER OF SEQ ID NOS: 220
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 218
LENGTH: 18
TYPE: DNA
ORGANISM: Human
US-09-249-730-218
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

```

; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-55

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 36
US-09-030-701-27/c
; Sequence 27, Application US/09030701B
; Patent No. 6214806
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schwartz, David A.
; TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING
; TITLE OF INVENTION: UNMETHYLATED CpG DINUCLEOTIDE IN THE TREATMENT OF
; TITLE OF INVENTION: LPS-ASSOCIATED DISORDERS
; FILE REFERENCE: C1039/7011
; CURRENT APPLICATION NUMBER: US/09/030,701B
; CURRENT FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/039,405
; PRIOR FILING DATE: 1997-02-28
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 27
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-030-701-27

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 37
US-09-286-098-59/c
; Sequence 59, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7028/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 59
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-030-701-27

US-09-118-220-1
; Sequence 1, Application US/09118220
; Patent No. 6140051
; GENERAL INFORMATION:
; APPLICANT: Brown, Lauren R.
; APPLICANT: Xu, Cheng
; TITLE OF INVENTION: FLUORESCENT DIBENZAZOLE DERIVATIVES
; TITLE OF INVENTION: AND METHODS RELATED THERETO
; NUMBER OF SEQUENCES: 1
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 620 Newport Center Drive, 16th Floor
; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: Fast-Seq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/118,220
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bartfield, Neil S
; REGISTRATION NUMBER: 39,901
; REFERENCE/DOCKET NUMBER: GENTA.050A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-235-8550
; TELEFAX: 619-235-0176
; TELEX:
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-09-118-220-1

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 35
US-08-738-652-55/c
; Sequence 55, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 3.0
```

```

; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-59

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
      |||||
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 38
US-09-286-098-104/c
; Sequence 104, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 104
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-104

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
      |||||
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 39
US-09-960-774-45/c
; Sequence 45, Application US/08960774
; Patent No. 6239116
; GENERAL INFORMATION:
; APPLICANT: Krieg et al.,
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/960,774
; FILING DATE: 30-October-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: U.S. Serial No. 6239116 08/738,652
; FILING DATE: October 30, 1996

```

```

; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Haile, Lisa A.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 08918/012001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619/678-5070
; TELEFAX: 619/678-5099
; INFORMATION FOR SEQ ID NO: 45:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
US-08-960-774-45

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
      |||||
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 40
US-09-078-954-14/c
; Sequence 14, Application US/09078954
; Patent No. 6287591
; GENERAL INFORMATION:
; APPLICANT: SEMPLE, Sean C.
; APPLICANT: Klimuk, Sandra K.
; APPLICANT: Harasym, Troy
; APPLICANT: Hope, Michael J.
; APPLICANT: Ansell, Steven M.
; APPLICANT: Cullis, Pieter
; APPLICANT: Scherrer, Peter
; APPLICANT: Geiser, Timothy
; APPLICANT: Zon, Gerald
; APPLICANT: Debeyer, Dan
; TITLE OF INVENTION: High Efficiency Encapsulation of Charged Therapeutic Agents in
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Opedahl & Larson
; STREET: PO Box 5270
; CITY: Frisco
; STATE: CO
; COUNTRY: USA
; ZIP: 80443-5270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS 5.0
; SOFTWARE: Word Perfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/078,954
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/856,374
; FILING DATE: 14-MAY-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Marina T. Larson
; REGISTRATION NUMBER: 32,038
; REFERENCE/DOCKET NUMBER: INEX.P-003
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (970) 668-2050
; TELEFAX: (970) 668-2082
; TELEX:
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:

```

```
/
/ LENGTH: 18
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ HYPOTHETICAL: no
/ ANTI-SENSE: yes
US-09-078-954-14

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 41
US-09-325-193A-51/c
; Sequence 51, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Schorr, Joachim
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Use of Nucleic Acids Containing
; FILE REFERENCE: C1039/7025/HCL
; CURRENT APPLICATION NUMBER: US/09/325,193A
; CURRENT FILING DATE: 1999-06-03
; PRIOR APPLICATION NUMBER: US 09/154,614
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: PCT/US98/04703
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: US 60/040,376
; PRIOR FILING DATE: 1997-03-10
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-51

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 42
US-09-724-426-17/c
; Sequence 17, Application US/09724426
; Patent No. 6414134
; GENERAL INFORMATION:
; APPLICANT: Reed, John
; TITLE OF INVENTION: Regulation of BCL-2 Gene Expression
; FILE REFERENCE: 10412-024
; CURRENT APPLICATION NUMBER: US/09/724,426
; CURRENT FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 17
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-724-426-17
```

```
Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 43
US-09-724-426-24/c
; Sequence 24, Application US/09724426
; Patent No. 6414134
; GENERAL INFORMATION:
; APPLICANT: Reed, John
; TITLE OF INVENTION: Regulation of BCL-2 Gene Expression
; FILE REFERENCE: 10412-024
; CURRENT APPLICATION NUMBER: US/09/724,426
; CURRENT FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 24
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-724-426-24
```

```
Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 44
US-09-191-170-53/c
; Sequence 53, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; TITLE OF INVENTION: for Activating Dendritic Cells
; FILE REFERENCE: C1039/7017
; CURRENT APPLICATION NUMBER: US/09/191,170
; CURRENT FILING DATE: 1998-11-13
; EARLIER APPLICATION NUMBER: US 08/960,774
; EARLIER FILING DATE: 1997-10-30
; EARLIER APPLICATION NUMBER: US 08/738,652
; EARLIER FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-191-170-53
```

```
Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 18

RESULT 45
US-09-724-426-17/c
; Sequence 17, Application US/09724426
; Patent No. 6414134
; GENERAL INFORMATION:
; APPLICANT: Reed, John
; TITLE OF INVENTION: Regulation of BCL-2 Gene Expression
; FILE REFERENCE: 10412-024
; CURRENT APPLICATION NUMBER: US/09/724,426
; CURRENT FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 17
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-724-426-17
```

```

Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 45
US-09-136-080E-45/c
; Sequence 45, Application US/09136080E
; Patent No. 6518017
; GENERAL INFORMATION:
; APPLICANT: Riley, Timothy A.
; APPLICANT: Brown, Bob D.
; APPLICANT: Arnold, Lyle J.
; TITLE OF INVENTION: COMBINATORIAL ANTISENSE LIBRARY
; FILE REFERENCE: OASIO.003A
; CURRENT APPLICATION NUMBER: US/09/136,080E
; CURRENT FILING DATE: 1998-08-18
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-136-080E-45

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
DB      18 ATGGCGCACGCTGGGAGA 1

RESULT 46
US-09-690-921-2/c
; Sequence 2, Application US/09690921
; Patent No. 6544518
; GENERAL INFORMATION:
; APPLICANT: Friede, Martin
; APPLICANT: Gerard, Catherine
; APPLICANT: Hermand, Philippe
; TITLE OF INVENTION: Vaccines
; FILE REFERENCE: B45181-1
; CURRENT APPLICATION NUMBER: US/09/690,921
; CURRENT FILING DATE: 2000-10-18
; PRIOR APPLICATION NUMBER: PCT/EP00/02920
; PRIOR FILING DATE: 2000-04-04
; PRIOR APPLICATION NUMBER: 09/301,829
; PRIOR FILING DATE: 1999-04-29
; PRIOR APPLICATION NUMBER: 9908885.8
; PRIOR FILING DATE: 1999-04-19
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Human
US-09-690-921-2

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
DB      18 ATGGCGCACGCTGGGAGA 1

RESULT 47
US-09-301-829A-2/c
; Sequence 2, Application US/09301829A
; Patent No. 6558670
; GENERAL INFORMATION:
; APPLICANT: Kriegl, Arthur M.
; TITLE OF INVENTION: Methods of Treating Cancer Using
; IMMUNOSTIMULATORY OLIGONUCLEOTIDES
; FILE REFERENCE: C1039/7021/HCL
US-09-301-829A-2

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
DB      18 ATGGCGCACGCTGGGAGA 1

RESULT 48
US-09-249-247-218/c
; Sequence 218, Application US/09249247
; Patent No. 6593305
; GENERAL INFORMATION:
; APPLICANT: WRIGHT, Jim A.
; APPLICANT: YOUNG, Aiping H.
; TITLE OF INVENTION: Antitumor Antisense Sequences Directed Against R1 and
; TITLE OF INVENTION: R2 Components of Ribonucleotide Reductase
; FILE REFERENCE: 032396-023
; CURRENT APPLICATION NUMBER: US/09/249,247
; CURRENT FILING DATE: 1999-02-11
; EARLIER APPLICATION NUMBER: US 60/023,040
; EARLIER FILING DATE: 1996-08-02
; EARLIER APPLICATION NUMBER: US 60/039,959
; EARLIER FILING DATE: 1997-03-07
; EARLIER APPLICATION NUMBER: US 08/904,901
; EARLIER FILING DATE: 1997-08-01
; NUMBER OF SEQ ID NOS: 220
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 218
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Human
US-09-249-247-218

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
DB      18 ATGGCGCACGCTGGGAGA 1

RESULT 49
US-09-337-619-45/c
; Sequence 45, Application US/09337619
; Patent No. 6653292
; GENERAL INFORMATION:
; APPLICANT: Kriegl, Arthur M.
; TITLE OF INVENTION: Methods of Treating Cancer Using
; IMMUNOSTIMULATORY OLIGONUCLEOTIDES
; FILE REFERENCE: C1039/7021/HCL
US-09-337-619-45/c

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
DB      18 ATGGCGCACGCTGGGAGA 1

```

```

; CURRENT APPLICATION NUMBER: US/09/337,619
; CURRENT FILING DATE: 1999-06-21
; EARLIER APPLICATION NUMBER: US 08/960,774
; EARLIER FILING DATE: 1997-10-30
; EARLIER APPLICATION NUMBER: US 08/738,652
; EARLIER FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/396,063
; EARLIER FILING DATE: 1995-02-07
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-337-619-45

```

```

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 ATGGCGCACGCTGGGAGA 18
   |||||
DB 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 50
US-09-082-649B-60/c
; Sequence 60, Application US/09082649B
; Patent No. 6339068
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schott, Joachim
; APPLICANT: Wu, Tong
; TITLE OF INVENTION: Vectors and Methods for Immunization or
; FILE REFERENCE: C1039/7009
; CURRENT APPLICATION NUMBER: US/09/082,649B
; CURRENT FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 60/047,233
; PRIOR FILING DATE: 1997-05-20
; PRIOR APPLICATION NUMBER: US 60/047,209
; PRIOR FILING DATE: 1997-05-20
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 60
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-082-649B-60

```

```

Query Match      2.9%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 27;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 ATGGCGCACGCTGGGAGA 18
   |||||
DB 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 51
US-08-217-082A-8/c
; Sequence 8, Application US/08217082A
; Patent No. 5734033
; GENERAL INFORMATION:
; APPLICANT: Reed, John
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES FOR INHIBITING THE

```

```

; TITLE OF INVENTION: GROWTH OF CELLS EXPRESSING THE HUMAN BCL-2 GENE
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSER: P.C.
; STREET: 224 Airport Parkway
; CITY: San Jose
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 95110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/217,082A
; FILING DATE: 24-MAR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/840,716
; FILING DATE: 21-FEB-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/288,692
; FILING DATE: 22-DEC-1988
; ATTORNEY/AGENT INFORMATION:
; NAME: Fortney, Andrew D.
; REGISTRATION NUMBER: 34,600
; REFERENCE/DOCKET NUMBER: 3335-067-55 FWC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (408) 436-2070
; TELEFAX: (408) 436-2075
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: Synthetic DNA
; ANTI-SENSE: YES
US-08-217-082A-8

```

```

Query Match      2.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 28;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 4 GCGCACGCTGGGAGAAC 20
   |||||
DB 17 GCGCACGCTGGGAGAAC 1

```

```

RESULT 52
US-08-217-082A-9/c
; Sequence 9, Application US/08217082A
; Patent No. 5734033
; GENERAL INFORMATION:
; APPLICANT: Reed, John
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES FOR INHIBITING THE
; TITLE OF INVENTION: GROWTH OF CELLS EXPRESSING THE HUMAN BCL-2 GENE
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSER: P.C.
; STREET: 224 Airport Parkway
; CITY: San Jose
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 95110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

```

SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/217,082A
FILING DATE: 24-MAR-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/840,716
FILING DATE: 21-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/288,692
FILING DATE: 22-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Fortney, Andrew D.
REGISTRATION NUMBER: 34,600
REFERENCE/DOCKET NUMBER: 3335-067-55 FWC
TELEPHONE: (408) 436-2070
TELEFAX: (408) 436-2075
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: Synthetic DNA
ANTI-SENSE: YES
US-08-217-082A-9

Query Match 2.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 28;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGGCGACGCTGGGAG 17
Db 17 ATGGGCGACGCTGGGAG 1

RESULT 53
US-07-936-421-10
Sequence 10, Application US/07936421
Patent No. 5750390
GENERAL INFORMATION:
APPLICANT: James D. Thompson
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED
TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2
TITLE OF INVENTION: GENE
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 611 West Sixth Street
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90017
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/936,421
FILING DATE: 19920826
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.

REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 197/243
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 17
TYPE: NUCLEIC ACID
STRANDEDNESS: single
TOPOLOGY: linear
US-07-936-421-10

Query Match 2.8%; Score 17; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 28;
Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 284 TGGCCCTCCGCCAAGCC 300
Db 1 UGCCCCCGCCCAAGCC 17

RESULT 54
US-08-877-831-1/c
Sequence 1, Application US/08877831
Patent No. 5935937
GENERAL INFORMATION:
APPLICANT: Smith, Mitchell R.
TITLE OF INVENTION: Compositions and Methods for
TITLE OF INVENTION: Inducing Apoptosis
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dann, Dorfman, Herrell and Skillman
STREET: 1601 Market Street Suite 720
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19103-2307
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/877,831
FILING DATE: 18-JUN-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/020,072
FILING DATE: 19-JUN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Hagan, Patrick J.
REGISTRATION NUMBER: 27,643
REFERENCE/DOCKET NUMBER: FCCC 96-08
TELEPHONE: (215)563-4100
TELEFAX: (215)563-4044
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: not relevant
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-877-831-1

Query Match 2.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 28;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY      4 GCGCAGCTGGGAGAAC 20
Db      17 GCGCAGCTGGGAGAAC 1

RESULT 55
US-09-030-701-41/c
; Sequence 41, Application US/09030701B
; Patent No. 6214806
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schwartz, David A.
; TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING
; TITLE OF INVENTION: UNMETHYLATED CpG DINUCLEOTIDE IN THE TREATMENT OF
; TITLE OF INVENTION: LPS-ASSOCIATED DISORDERS
; FILE REFERENCE: C1039/7011
; CURRENT APPLICATION NUMBER: US/09/030,701B
; CURRENT FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/039,405
; PRIOR FILING DATE: 1997-02-28
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 41
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-030-701-41

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 34;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCGCTGGGAGA 18
Db      18 ATGGCGCGCTGGGAGA 1

RESULT 56
US-09-030-701-60/c
; Sequence 60, Application US/09030701B
; Patent No. 6214806
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schwartz, David A.
; TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING
; TITLE OF INVENTION: UNMETHYLATED CpG DINUCLEOTIDE IN THE TREATMENT OF
; TITLE OF INVENTION: LPS-ASSOCIATED DISORDERS
; FILE REFERENCE: C1039/7011
; CURRENT APPLICATION NUMBER: US/09/030,701B
; CURRENT FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/039,405
; PRIOR FILING DATE: 1997-02-28
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 60
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-030-701-60

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 34;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCGCTGGGAGA 18
Db      18 ATGGCGCGCTGGGAGA 1
```

```
RESULT 57
US-09-286-098-72/c
; Sequence 72, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 72
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-72

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 34;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCGCTGGGAGA 18
Db      18 ATGGCGCGCTGGGAGA 1

RESULT 58
US-08-960-774-72/c
; Sequence 72, Application US/08960774
; Patent No. 6239116
; GENERAL INFORMATION:
; APPLICANT: Krieg et al.,
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/960,774
; FILING DATE: 30-October-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: U.S. Serial No. 6239116 08/738,652
; FILING DATE: October 30, 1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Haile, Lisa A.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 08918/012001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619/678-5070
; TELEFAX: 619/678-5099
; INFORMATION FOR SEQ ID NO: 72:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
```


Db 1 CCGGUGGCCACGUG 16

RESULT 62
US-08-584-040-7436/c
; Sequence 7436, Application US/08584040
; Patent No. 6346398
; GENERAL INFORMATION:
; APPLICANT: Pavco, Pamela
; APPLICANT: McSwiggen, James
; APPLICANT: Stinchcomb, Dan T.
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE
; TITL OF INVENTION: TREATMENT OF DISEASES OR
; TITLE OF INVENTION: CONDITIONS RELATED TO LEVELS
; TITLE OF INVENTION: OF VASCULAR ENDOTHELIAL
; TITLE OF INVENTION: GROWTH FACTOR
; NUMBER OF SEQUENCES: 8502
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/584,040
; FILING DATE: January 11, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/005,974
; FILING DATE: October 26, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 218/064
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 7436:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-584-040-7436

Query Match 2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 40;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 563 GGATCCAGGATAACGGA 579
Db 17 GGATCCAGGATAACGGA 1

RESULT 64
US-07-936-421-15/c
; Sequence 15, Application US/07936421
; Patent No. 5750390
; GENERAL INFORMATION:
; APPLICANT: James D. Thompson
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED
; TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2
; TITLE OF INVENTION: GENE
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90017
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
; SOFTWARE: Wordperfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/936,421
; FILING DATE: 19920826
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; PRIOR APPLICATION DATA: including application
; PRIOR APPLICATION DATA: described below:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 197/243
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single

RESULT 68
 US-09-216-584-8
 ; Sequence 8, Application US/09216584
 ; Patent No. 6548657
 ; GENERAL INFORMATION:
 ; APPLICANT: Alex, Burgin
 ; APPLICANT: Leonid, Beigelman
 ; APPLICANT: Laurent, Bellon
 ; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
 ; FILE REFERENCE: MBH00-853-A; RPI 237/167
 ; CURRENT FILING DATE: 1998-12-18
 ; PRIOR FILING DATE: 1998-06-09
 ; PRIOR FILING DATE: 1997-12-19
 ; PRIOR FILING DATE: 1997-06-09
 ; NUMBER OF SEQ ID NOS: 52
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 8
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; OTHER INFORMATION: Accessible site within Bcl-2 transcript
 US-09-216-584-8
 Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 51;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 533 CTGAGTACTGAA 545
 DB 1 CTGAGTACTGAA 13
 RESULT 69
 US-09-216-584-9
 ; Sequence 9, Application US/09216584
 ; Patent No. 6548657
 ; GENERAL INFORMATION:
 ; APPLICANT: Alex, Burgin
 ; APPLICANT: Leonid, Beigelman
 ; APPLICANT: Laurent, Bellon
 ; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
 ; FILE REFERENCE: MBH00-853-A; RPI 237/167
 ; CURRENT FILING DATE: 1998-12-18
 ; PRIOR FILING DATE: 1998-06-09
 ; PRIOR FILING DATE: 1997-12-19
 ; PRIOR FILING DATE: 1997-06-09
 ; NUMBER OF SEQ ID NOS: 52
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 9
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; OTHER INFORMATION: Accessible site within Bcl-2 transcript
 US-09-216-584-9
 Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 51;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 452 TTGAGTTCGGTG 464
 DB 1 TTGAGTTCGGTG 464

Db 1 TTGAGTTCGGTG 13
 RESULT 70
 US-09-216-584-10
 ; Sequence 10, Application US/09216584
 ; Patent No. 6548657
 ; GENERAL INFORMATION:
 ; APPLICANT: Alex, Burgin
 ; APPLICANT: Leonid, Beigelman
 ; APPLICANT: Laurent, Bellon
 ; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
 ; FILE REFERENCE: MBH00-853-A; RPI 237/167
 ; CURRENT FILING DATE: 1998-12-18
 ; PRIOR FILING DATE: 1998-06-09
 ; PRIOR FILING DATE: 1997-12-19
 ; PRIOR FILING DATE: 1997-06-09
 ; NUMBER OF SEQ ID NOS: 52
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 10
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; OTHER INFORMATION: Accessible site within Bcl-2 transcript
 US-09-216-584-10
 Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 51;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 47 TGAAGTACATCCA 59
 DB 1 TGAAGTACATCCA 13
 RESULT 71
 US-09-216-584-11
 ; Sequence 11, Application US/09216584
 ; Patent No. 6548657
 ; GENERAL INFORMATION:
 ; APPLICANT: Alex, Burgin
 ; APPLICANT: Leonid, Beigelman
 ; APPLICANT: Laurent, Bellon
 ; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
 ; FILE REFERENCE: MBH00-853-A; RPI 237/167
 ; CURRENT FILING DATE: 1998-12-18
 ; PRIOR FILING DATE: 1998-06-09
 ; PRIOR FILING DATE: 1997-12-19
 ; PRIOR FILING DATE: 1997-06-09
 ; NUMBER OF SEQ ID NOS: 52
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 11
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; OTHER INFORMATION: Accessible site within Bcl-2 transcript
 US-09-216-584-11
 Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 51;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 452 TTGAGTTCGGTG 464
 DB 1 TTGAGTTCGGTG 464

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 51;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 273 TGTGTCACCTG 285
DB 1 TGTGTCACCTG 13

RESULT 72

US-09-216-584-12
; Sequence 12, Application US/09216584
; Patent No. 6548657
; GENERAL INFORMATION:
; APPLICANT: Alex, Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Beillon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-853-A; RPI 237/167
; CURRENT APPLICATION NUMBER: US/09/216,584
; CURRENT FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 12
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-09-216-584-12

Query Match 2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 51;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 169 CCCCATCCAGCG 181
DB 1 CCCCATCCAGCG 13

RESULT 73

US-09-216-584-13
; Sequence 13, Application US/09216584
; Patent No. 6548657
; GENERAL INFORMATION:
; APPLICANT: Alex, Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Beillon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-853-A; RPI 237/167
; CURRENT APPLICATION NUMBER: US/09/216,584
; CURRENT FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 13
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-09-216-584-13

Query Match 2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 51;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 561 CTGGATCCAGGAT 573
DB 1 CTGGATCCAGGAT 13

RESULT 74

US-09-855-159A-13
; Sequence 13, Application US/09855159A
; Patent No. 6620595
; GENERAL INFORMATION:
; APPLICANT: Cannon, Paula
; APPLICANT: Barcova, Maria
; TITLE OF INVENTION: Retroviral Vectors Comprising An Enhanced 3' Transcription Termin
; FILE REFERENCE: 4-31439A/USC
; CURRENT APPLICATION NUMBER: US/09/855,159A
; CURRENT FILING DATE: 2001-05-14
; PRIOR APPLICATION NUMBER: US 60/203,884
; PRIOR FILING DATE: 2000-05-12
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 13
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Simian virus 40
US-09-855-159A-13

Query Match 2.1%; Score 13; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 57 CCATTATAAGCTG 69
DB 1 CCATTATAAGCTG 13

RESULT 75

US-07-936-421-3
; Sequence 3, Application US/07936421
; Patent No. 5750390
; GENERAL INFORMATION:
; APPLICANT: James D. Thompson
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED
; TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2
; TITLE OF INVENTION: GENE
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90017
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; CURRENT APPLICATION NUMBER: US/07/936,421
; FILING DATE: 19920826
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; PRIOR APPLICATION DATA: including application
; PRIOR APPLICATION DATA: described below:
; APPLICATION NUMBER:
; FILING DATE:
; none

```
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 197/243
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-07-936-421-3
;
; Query Match          2.0%; Score 12; DB 1; Length 12;
; Best Local Similarity 75.0%; Pred. No. 58;
; Matches 9; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
;
; QY      46 ATGAAGTACATC 57
; Db      1 AUGAAGUACAUC 12
;
; RESULT 76
; US-08-778-702-10/c
; Sequence 10, Application US/08778702
; Patent No. 5763186
; GENERAL INFORMATION:
; APPLICANT: Lugtke, Douglas N.
; APPLICANT: Monahan, John E.
; APPLICANT: Unger, John T.
; TITLE OF INVENTION: Use of Antisense Oligomers in a
; TITLE OF INVENTION: Process for Controlling Contamination in Nucleic Acid
; TITLE OF INVENTION: Amplification Reactions
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Ciba Corning Diagnostics Corp.
; STREET: 63 No. 5763186th Street
; CITY: Medfield
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02052
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette 3.5 inch, 1.44 Mb storage
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: IBM-DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/778,702
; FILING DATE: 03-JAN-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/157,364
; FILING DATE: 23-NOV-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: MORGENSEN, Arthur S.
; REGISTRATION NUMBER: 28,244
; REFERENCE/DOCKET NUMBER: CDD-141
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 508 359-3836
; TELEFAX: 508 359-3885
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 bases
; TYPE: nucleic acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; MOLECULE TYPE:
; DESCRIPTION: Called Clamp QB-1.
; HYPOTHETICAL: No
; ANTI-SENSE: Yes
;
; ; POSITION IN GENOME:
; ; UNITS: Base 64 to base 75 of the negative strand
; ; UNITS: nanovariant sequence.
; US-08-778-702-10
;
; Query Match          2.0%; Score 12; DB 1; Length 12;
; Best Local Similarity 100.0%; Pred. No. 58;
; Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY      567 CCAGGATAACGG 578
; Db      12 CCAGGATAACGG 1
;
; RESULT 77
; US-09-475-947A-126/c
; Sequence 126, Application US/09475947A
; Patent No. 6472154
; GENERAL INFORMATION:
; APPLICANT: Garner, Harold R.
; APPLICANT: Wren, Jonathan D.
; APPLICANT: Minna, John D.
; TITLE OF INVENTION: Polymorphic Repeats in Human Genes
; FILE REFERENCE: UTSD0667
; CURRENT APPLICATION NUMBER: US/09/475,947A
; CURRENT FILING DATE: 1999-12-31
; NUMBER OF SEQ ID NOS: 346
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 126
; LENGTH: 12
; TYPE: DNA
; ORGANISM: human
; US-09-475-947A-126
;
; Query Match          2.0%; Score 12; DB 1; Length 12;
; Best Local Similarity 100.0%; Pred. No. 58;
; Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY      115 CCCCCGGGGGCC 126
; Db      12 CCCCCGGGGGCC 1
;
; RESULT 78
; US-07-936-421-13
; Sequence 13, Application US/07936421
; Patent No. 5750390
; GENERAL INFORMATION:
; APPLICANT: James D. Thompson
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: TREATMENT OF DISEASES CAUSED
; TITLE OF INVENTION: BY EXPRESSION OF THE BCL-2
; TITLE OF INVENTION: GENE
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90017
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/936,421
; FILING DATE: 19920826
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; INCLUDING application
```

```

; PRIOR APPLICATION DATA: described below
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Wardburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 197/243
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
US-07-936-421-13

Query Match 1.8%; Score 11; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 66;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 479 AGAGGTCAC 489
Db 1 AGAGGTCAC 11

RESULT 79
US-09-475-947A-126
; Sequence 126, Application US/09475947A
; Patent No. 6472154
; GENERAL INFORMATION:
; APPLICANT: Garner, Harold R.
; APPLICANT: Wren, Jonathan D.
; APPLICANT: Minna, John D.
; TITLE OF INVENTION: Polymorphic Repeats in Human Genes
; FILE REFERENCE: UTS0667
; CURRENT APPLICATION NUMBER: US/09/475,947A
; CURRENT FILING DATE: 1999-12-31
; NUMBER OF SEQ ID NOS: 346
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 126
; LENGTH: 12
; TYPE: DNA
; ORGANISM: human
US-09-475-947A-126

Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 114 GCCCCCGGGG 124
Db 2 GCCCCCGGGG 12

RESULT 80
US-09-030-701-38/c
; Sequence 38, Application US/09030701B
; Patent No. 6214806
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schwartz, David A.
; TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING
; TITLE OF INVENTION: UNMETHYLATED CpG DINUCLEOTIDE IN THE TREATMENT OF
; FILE REFERENCE: C1039/7011
; CURRENT APPLICATION NUMBER: US/09/030,701B
; CURRENT FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/039,405
; PRIOR FILING DATE: 1997-02-28
; NUMBER OF SEQ ID NOS: 65

; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-030-701-38

Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
Db 12 GCGGCACGCTG 2

RESULT 81
US-09-286-098-69/c
; Sequence 69, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 69
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-69

Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
Db 12 GCGGCACGCTG 2

RESULT 82
US-08-960-774-69/c
; Sequence 69, Application US/08960774
; Patent No. 6239116
; GENERAL INFORMATION:
; APPLICANT: Krieg et al.,
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
```

APPLICATION NUMBER: US/08/960,774
 FILING DATE: 30-October-1997
 CLASSIFICATION: 514
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: U.S. Serial No. 6239116 08/738,652
 FILING DATE: October 30, 1996
 CLASSIFICATION: 514
 ATTORNEY/AGENT INFORMATION:
 NAME: Haile, Lisa A.
 REGISTRATION NUMBER: 38,347
 REFERENCE/DOCKET NUMBER: 08918/012001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 619/678-5070
 TELEFAX: 619/678-5099
 INFORMATION FOR SEQ ID NO: 69:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 12 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: cDNA
 US-08-960-774-69

Query Match 1.8%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GGCGCAGCGTG 13
 |||||
 DB 12 GGCGCAGCGTG 2

RESULT 83
 US-09-325-193A-59/c
 Sequence 59, Application US/09325193A
 Patent No. 6406705
 GENERAL INFORMATION:
 APPLICANT: Davis, Heather L.
 APPLICANT: Schorr, Joachim
 APPLICANT: Krieg, Arthur M.
 TITLE OF INVENTION: Use of Nucleic Acids Containing
 FILE OF INVENTION: Unmethylated CpG Dinucleotide as an Adjuvant
 FILE REFERENCE: C1039/7025/HCL
 CURRENT APPLICATION NUMBER: US/09/325,193A
 CURRENT FILING DATE: 1999-06-03
 PRIOR APPLICATION NUMBER: US 09/154,614
 PRIOR FILING DATE: 1998-09-16
 PRIOR APPLICATION NUMBER: PCT/US98/04703
 PRIOR FILING DATE: 1998-03-10
 PRIOR APPLICATION NUMBER: US 60/040,376
 PRIOR FILING DATE: 1997-03-10
 NUMBER OF SEQ ID NOS: 98
 SOFTWARE: FastSeq for Windows Version 3.0
 SEQ ID NO 59
 LENGTH: 12
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Synthetic Oligonucleotide
 US-09-325-193A-59

Query Match 1.8%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GGCGCAGCGTG 13
 |||||
 DB 12 GGCGCAGCGTG 2

RESULT 84
 US-09-191-170-63/c
 Sequence 63, Application US/09191170

Patent No. 6429199
 GENERAL INFORMATION:
 APPLICANT: Krieg, Arthur M.
 APPLICANT: Hartmann, Gunther
 TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
 TITLE OF INVENTION: for Activating Dendritic Cells
 FILE REFERENCE: C1039/7017
 CURRENT APPLICATION NUMBER: US/09/191,170
 CURRENT FILING DATE: 1998-11-13
 EARLIER APPLICATION NUMBER: US 08/960,774
 EARLIER FILING DATE: 1997-10-30
 EARLIER APPLICATION NUMBER: US 08/738,652
 EARLIER FILING DATE: 1996-10-30
 EARLIER APPLICATION NUMBER: US 08/386,063
 EARLIER FILING DATE: 1995-02-07
 EARLIER APPLICATION NUMBER: US 08/276,358
 EARLIER FILING DATE: 1994-07-15
 NUMBER OF SEQ ID NOS: 99
 SOFTWARE: FastSeq for Windows Version 3.0
 SEQ ID NO 63
 LENGTH: 12
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Synthetic oligonucleotide
 US-09-191-170-63

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 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GGCGCAGCGTG 13
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 DB 12 GGCGCAGCGTG 2

RESULT 85
 US-09-337-619-69/c
 Sequence 69, Application US/09337619
 Patent No. 6653292
 GENERAL INFORMATION:
 APPLICANT: Krieg, Arthur M.
 TITLE OF INVENTION: Methods of Treating Cancer Using
 FILE OF INVENTION: Immunostimulatory Oligonucleotides
 FILE REFERENCE: C1039/7021/HCL
 CURRENT APPLICATION NUMBER: US/09/337,619
 CURRENT FILING DATE: 1999-06-21
 EARLIER APPLICATION NUMBER: US 08/960,774
 EARLIER FILING DATE: 1997-10-30
 EARLIER APPLICATION NUMBER: US 08/738,652
 EARLIER FILING DATE: 1996-10-30
 EARLIER APPLICATION NUMBER: US 08/386,063
 EARLIER FILING DATE: 1995-02-07
 EARLIER APPLICATION NUMBER: US 08/276,358
 EARLIER FILING DATE: 1994-07-15
 NUMBER OF SEQ ID NOS: 123
 SOFTWARE: FastSeq for Windows Version 3.0
 SEQ ID NO 69
 LENGTH: 12
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Synthetic Oligonucleotide
 US-09-337-619-69

Query Match 1.8%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 72;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GGCGCAGCGTG 13
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 DB 12 GGCGCAGCGTG 2

Search completed: September 22, 2004, 08:57:09
Job time : 1.6secs

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FILING DATE: June 10, 1991

Matches 17;

QY 1692 CGGCGGCCGGCGGGGGCTTCGGCTCAGCCCG 1723
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D6 33 CRRYCGAGGGVAGGRYCTGGGCYCAGCCYG 2

102(e) cl 70

RESULT 3
US-07-812-421-10/c
; Sequence 10, Application US/07812421
; Patent No. 5932697
; GENERAL INFORMATION:
; APPLICANT: Caceci, Thomas
; APPLICANT: Toth, Thomas E.
; APPLICANT: Szumanski, Maria B.W.
; TITLE OF INVENTION: SYNTHETIC ANTIFREEZE PEPTIDE AND
; TITLE OF INVENTION: SYNTHETIC GENE CODING FOR ITS PRODUCTION
; NUMBER OF SEQUENCES: 43
; CORRESPONDENCE ADDRESS:

102(e) c2 708 74

ADDRESSER: WHITHAM, CURTIS & WHITHAM
STREET: Reston Intl. Center, 11800 Sunrise Valley Dr.,
STREET: Suite 900
CITY: Reston
STATE: VA
COUNTRY: USA
ZIP: 20191
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/812,421
FILING DATE: 23-DEC-1991
CLASSIFICATION: 435
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/588,437
FILING DATE: 25-SEP-1990
ATTORNEY/AGENT INFORMATION:
NAME: Whitcham, Michael E.
REGISTRATION NUMBER: 32,635
REFERENCE/DOCKET NUMBER: CIT.016
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-391-2510
TELEFAX: 703-391-9035
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 33 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA
US-07-812-421-10

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Best Local Similarity 71.9%; Pred. No. 2.2;
Matches 23; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

          74  GCTCCGCCGCCGCCGCTGCCAGCGAAGGTGC 105
          32  GCAGCTCGCGCGCGCGAGCCAGCCGCGAGCTAC 1

RESULT 4
US-07-812-421-15/c
; Sequence 15, Application US/07812421
; Patent No. 5932897
; GENERAL INFORMATION:
; APPLICANT: Caceci, Thomas
; APPLICANT: Toth, Thomas B.
; APPLICANT: Szumanski, Maria B.W.
; TITLE OF INVENTION: SYNTHETIC ANTIFREEZE PEPTIDE AND
; TITLE OF INVENTION: SYNTHETIC GENE CODING FOR ITS PRODUCTION
; NUMBER OF SEQUENCES: 43

```

```

CORRESPONDENCE ADDRESS:
ADDRESS: WHITHAM, CURTIS & WHITHAM
STREET: Reston Int'l. Center, 11800 Sunrise Valley Dr.,
STREET: Suite 900
CITY: Reston
STATE: VA
COUNTRY: USA
ZIP: 20191

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/812,421
FILING DATE: 23-DEC-1991
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
PRIORITY APPLICATION NUMBER: US 07/588,437
FILING DATE: 25-SEP-1990
ATTORNEY/AGENT INFORMATION:
NAME: Whitham, Michael E.
REGISTRATION NUMBER: 32,635
REFERENCE/DOCKET NUMBER: CIT.016
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-391-2510
TELEFAX: 703-391-9035
INFORMATION FOR SEQ. ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 33 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA
US-07-812-421-15

Query Match 0.3%; Score 17.6; DB 1; Length 33
Best Local Similarity 71.9%; Pred. No. 2.2;
Matches 23; Conservative 0; Mismatches 9; Indels

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DB 32 GCAGCTGCGCGCGCGCAGCTGCGCACTAC 1

Search completed: September 29, 2004, 10:46:38
Job time: 1 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: September 22, 2004, 08:52:48 ; Search time 2 Seconds
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Title: US-09-375-514B-22
Perfect score: 615
Sequence: 1 atgcgacgtggagaaac.....ctggtagtgatgtctgggc 615

Scoring table: IDENTITY NUC
                Gapop 10.0 , Gapext 0.5

Searched: 220 seqs, 3976 residues

Total number of hits satisfying chosen parameters: 440

Minimum DB seq length: 10
Maximum DB seq length: 40

Post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 236 summaries

Database : rge22.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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1 39 39 6.3 39 1 AX377551 ACCESSION:AX377551
2 37.4 39 6.1 39 1 AX377552 ACCESSION:AX377552
3 37 39 6.0 39 1 AX377550 ACCESSION:AX377550
4 36 36 5.9 36 1 AR007301 ACCESSION:AR007301
5 33 33 5.4 33 1 AR007291 ACCESSION:AR007291
6 28 28 4.6 28 1 AR007294 ACCESSION:AR007294
7 25.4 27 4.1 27 1 E49819 ACCESSION:E49819
8 25.4 27 4.1 27 1 E49821 ACCESSION:E49821
9 25.4 27 4.1 27 1 BD094984 ACCESSION:BD094984
10 25.4 27 4.1 27 1 BD094986 ACCESSION:BD094986
11 24.4 26 4.0 26 1 AX477733 ACCESSION:AX477733
12 24.4 26 4.0 26 1 AX477734 ACCESSION:AX477734
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14 24 24 3.9 24 1 AX427162 ACCESSION:AX427162
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Best Local Similarity 100.0%; Pred. No. 4.7;
Matches 33; Conservative 0; Mismatches 0; Indels

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Best Local Similarity	100.0%	Pred. NO. 4.7;			
Matches 33;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;	
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DB	1	CACCGGGCACTTCTCTCCAGGCCGGGCACA	33		
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LOCUS	AR007294	28 bp	DNA	linear	PAT 04-DEC-1998

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DEFINITION      Sequence 8 from patent US 5750390.
ACCESSION       AR007294
VERSION         AR007294.1  GI:3966778
KEYWORDS        Unknown.
SOURCE          Unknown.
ORGANISM        Unclassified.
REFERENCE       1 (bases 1 to 28)
AUTHORS        Thompson,J.D. and Draper,K.G.
TITLE          Method and reagent for treatment of diseases caused by expression
               of the bcl-2 gene
JOURNAL         Patent: US 5750390-A 8 12-MAY-1998;
               Location/Qualifiers
FEATURES        source
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Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 271 CCTGTGCTCCACTGCGCTCGCCCAAG 298
Db 1 CCTGTGCTCCACTGCGCTCGCCCAAG 28

RESULT 7
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LOCUS           E49819                27 bp    DNA    linear    PAT 27-AUG-2002
DEFINITION     apoptosis-inhibiting polypeptide, gene and polynucleotide encoding
               it, and composition containing the same.
ACCESSION      E49819
VERSION        E49819.1  GI:22554857
KEYWORDS       JP 2001161372-A/8.
SOURCE         synthetic construct
ORGANISM       artificial sequences.
REFERENCE      1 (bases 1 to 27)
AUTHORS        Shibazaki,H. and Kuma,H.
TITLE          Apoptosis-inhibiting polypeptide, gene and polynucleotide encoding
               it, and composition containing the same
JOURNAL        Patent: JP 2001161372-A 8 19-JUN-2001;
               HISAMITSU PHARMACEUT CO INC
COMMENT        OS Artificial Sequence
               PN JP 2001161372-A/8
               PD 19-JUN-2001
               PF 09-DEC-1999 JP 1999350427
               PI HIROSHI SHIBAZAKI,HIDEKAZU KUMA
               PC C12N15/09,A61K31/711,A61K38/00,A61K48/00,A61P21/04,A61P25/00,
               PC A61P25/28,A61P43/00,C07K14/47,C12N7/00,C12N15/00,A61K37/02 CC
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Best Local Similarity 96.3%; Pred. No. 22;
Matches 26; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 334 TTCGCGAGATGTCAGCCAGCTGCAC 360
Db 27 TTCGCGAGATGTCAGCCAGCTGCAC 1

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DEFINITION     Apoptosis-inhibiting polypeptides, genes and polynucleotides
               encoding same, and compositions containing them.
ACCESSION      BD094984
VERSION        BD094984.1  GI:22640572
KEYWORDS       WO 0142459-A/8.
SOURCE         synthetic construct
ORGANISM       artificial sequences.
REFERENCE      1 (bases 1 to 27)
AUTHORS        Shibazaki,H. and Kuma,H.
TITLE          Apoptosis-inhibiting polypeptides, genes and polynucleotides
               encoding same, and compositions containing them
JOURNAL        Patent: WO 0142459-A 8 14-JUN-2001;
               HISAMITSU PHARMACEUTICAL CO INC,FUTOSHI SHIBAZAKI,HIDEKAZU KUMA
COMMENT        OS Artificial Sequence
               PN WO 0142459-A/8
               PD 14-JUN-2001
               PF 07-DEC-2000 WO 2000JP008667
               PR 09-DEC-1999 JP 99P 350427
               PI FUTOSHI SHIBAZAKI,HIDEKAZU KUMA
               PC C12N15/12,C07K14/82,C12N15/18,A61K38/17,A61K31/711,A61K48/00,
               PC A61P43/00,
               PC A61P25/28,A61P21/04,A61P9/10,A61P1/16,A61P27/02 CC
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               FH Apoptosis-inhibiting polypeptides, genes and polynucleotides
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               CC same, and compositions containing them
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Best Local Similarity 96.3%; Pred. No. 22;
Matches 26; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 196 GTCGCGAGGAGCTGCGCTCGAGACC 222
Db 27 GTCGCGAGGAGCTGCGCTCGAGACC 1

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DEFINITION     Apoptosis-inhibiting polypeptide, gene and polynucleotide encoding
               it, and composition containing the same.
ACCESSION      E49821

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Query Match
Best Local Similarity 4.1%; Score 25.4; DB 1; Length 27;
Matches 26; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 196 GTGCGCAGACCTGCGCGTGCAGACC 222
DB 27 GTGCGCAGACCGCGCGTGCAGACC 1

RESULT 10
BD094986 27 bp DNA linear PAT 27-AUG-2002
LOCUS Apoptosis-inhibiting polypeptides, genes and polynucleotides
DEFINITION encoding same, and compositions containing them.
ACCESSION BD094986
VERSION BD094986.1 GI:22640574
KEYWORDS WO 0142459-A/10.
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 27)
AUTHORS Shibasaki, F. and Kuma, H.
TITLE Apoptosis-inhibiting polypeptides, genes and polynucleotides
JOURNAL Patent: WO 0142459-A 10 14-JUN-2001;
COMMENT HISAMITSU PHARMACEUTICAL CO INC, FUTOSHI SHIBAZAKI, HIDEKAZU KUMA
PN WO 0142459-A/10
PD 14-JUN-2001
PF 07-DEC-2000 WO 2000JP008667
PR 09-DEC-1999 JP 99P 350427
PI FUTOSHI SHIBAZAKI, HIDEKAZU KUMA
PC C12N15/12, C07K14/82, C12N15/18, A61K38/17, A61K31/711, A61K48/00,
PC A61P43/00,
PC A61P25/28, A61P21/04, A61P9/10, A61P1/16, A61P27/02 CC
Apoptosis-inhibiting polypeptides, genes and polynucleotides CC
encoding
CC same, and compositions containing them
FH Key Location/Qualifiers
FT source 1..27
FT /organism="Artificial Sequence".
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Query Match
Best Local Similarity 4.1%; Score 25.4; DB 1; Length 27;
Matches 26; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 334 TTCGCGAGATGTCAGCGAGTGAC 360
DB 27 TTCGCGAGATGCCAGCGAGTGAC 1

RESULT 11
AX477733
LOCUS AX477733 26 bp DNA linear PAT 12-AUG-2002
DEFINITION Sequence 15 from Patent WO0240530.
ACCESSION AX477733
VERSION AX477733.1 GI:22216880
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Fesik, S.W., Petros, A.M., Yoon, H. and Nettlesheim, D.G.
TITLE Mutant bcl-2 proteins and uses thereof
JOURNAL Patent: WO 0240530-A 15 23-MAY-2002;
ABEOTT LABORATORIES (US)
FEATURES
source
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Location/Qualifiers

Query Match
Best Local Similarity 4.1%; Score 25.4; DB 1; Length 27;
Matches 26; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 317 GCCGCTACCGCGCGACTTCGCCGAG 342
DB 26 GCCGCTACCGCGCGACTTCGCCGAG 1

RESULT 13
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LOCUS AX113808 24 bp DNA linear PAT 01-MAY-2001
DEFINITION Sequence 54 from Patent WO0127256.
ACCESSION AX113808
VERSION AX113808.1 GI:13939974
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Wu, L., Carey, M.F. and Belldgrun, A.S.
TITLE Chimeric transcriptional regulatory element and methods for
prostate-targeted gene expression
JOURNAL Patent: WO 0127256-A 54 19-APR-2001;
The Regents of the University of California System (US)
FEATURES
source
1..24
Location/Qualifiers

Query Match
Best Local Similarity 3.9%; Score 24; DB 1; Length 24;
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Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 1 GCCGCTACCGCGCGACTTCGCCGAG 26

RESULT 12
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DEFINITION Sequence 16 from Patent WO0240530.
ACCESSION AX477734
VERSION AX477734.1 GI:22216881
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Fesik, S.W., Petros, A.M., Yoon, H. and Nettlesheim, D.G.
TITLE Mutant bcl-2 proteins and uses thereof
JOURNAL Patent: WO 0240530-A 16 23-MAY-2002;
ABEOTT LABORATORIES (US)
FEATURES
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Location/Qualifiers

Query Match
Best Local Similarity 4.0%; Score 24.4; DB 1; Length 26;
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 317 GCCGCTACCGCGCGACTTCGCCGAG 342
DB 26 GCCGCTACCGCGCGACTTCGCCGAG 1

RESULT 13
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LOCUS AX113808 24 bp DNA linear PAT 01-MAY-2001
DEFINITION Sequence 54 from Patent WO0127256.
ACCESSION AX113808
VERSION AX113808.1 GI:13939974
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Wu, L., Carey, M.F. and Belldgrun, A.S.
TITLE Chimeric transcriptional regulatory element and methods for
prostate-targeted gene expression
JOURNAL Patent: WO 0127256-A 54 19-APR-2001;
The Regents of the University of California System (US)
FEATURES
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Location/Qualifiers

Query Match
Best Local Similarity 3.9%; Score 24; DB 1; Length 24;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 450 CTTTGAGTTGCGGTGGGTGATGTG 473

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Db
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AX427162
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DEFINITION Sequence 11 from Patent WO0210374.
ACCESSION AX427162
VERSION AX427162.1 GI:21530543
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.
REFERENCE
1 Lin,S.L., Chuong,C.M. and Widelitz,R.B.
AUTHORS Gene silencing using mrna-cdna hybrids
TITLE Patent: WO 0210374-A 11 07-FEB-2002;
JOURNAL UNIVERSITY OF SOUTHERN CALIFORNIA (US)
FEATURES
Location/Qualifiers
source
1..24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="bcl2 primer"
Query Match 3.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 527 GGATGACTGAGTACCTGAACCGGC 550
|||||
Db 1 GGATGACTGAGTACCTGAACCGGC 24
|||||

RESULT 15
AX537133/c
LOCUS AX537133 24 bp RNA linear PAT 22-NOV-2002
DEFINITION Sequence 2 from Patent WO02055692.
ACCESSION AX537133
VERSION AX537133.1 GI:25263577
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.
REFERENCE
1 Kreutzer,R., Limmer,S., Vornlocher,H.P., Hadwiger,P., Geick,A.,
Ocker,M., Herold,C. and Schuppan,D.
TITLE Method for inhibiting the expression of a target gene and
medicament for treating a tumor disease
JOURNAL Patent: WO 02055692-A 2 18-JUL-2002;
Ribopharma AG (DE)
FEATURES
Location/Qualifiers
source
1..24
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/notes="Beschreibung der kunstlichen Sequenz:
Antisinn-Strang einer zu einer Sequenz des humanen
Bcl-2-Gens Komplement ren dsRNA"
Query Match 3.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 199 GCCAGGACCTCGCGCTGCAGACC 222
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Db 24 GCCAGGACCTCGCGCTGCAGACC 1
|||||

RESULT 16
BD144227/c
LOCUS BD144227 24 bp DNA linear PAT 17-JAN-2003.
|||||

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DEFINITION Method for examining allergic diseases.
ACCESSION BD144227
VERSION BD144227.1 GI:27849985
KEYWORDS synthetic construct
SOURCE synthetic construct
artificial sequences.
ORGANISM
REFERENCE
1 (bases 1 to 24)
AUTHORS Sugita,Y., Hashida,R., Ogawa,K., Fujishima,T. and Tsujimoto,K.
TITLE Method for examining allergic diseases
JOURNAL Patent: JP 2002119281-A 15 23-APR-2002;
GENOX RESEARCH INC,THE DIRECTOR OF NATIONAL CHILDREN'S HOSPITAL
COMMENT CS Artificial Sequence
FN JP 2002119281-A/15
PD 23-APR-2002
PF 11-OCT-2000 JP 2000311193
PI YUJI SUGITA, RYOICHI HASHIDA, KAORU OGAWA, TOMOKO FUJISHIMA, KOZO
PT TSUJIMOTO
PC C12N15/09,A01K67/027,A61K31/713,A61K45/00,A61K48/00,A61P37/08,
PC C12N5/10,
PC C12Q1/02,C12Q1/68,G01N33/15,G01N33/50// (C12N15/09,C12R1:91),
PC (C12N5/10,C12R1:91), (C12Q1/02,C12R1:91), (C12N15/00,C12N5/00,
(C12N15/00,C12R1:91), (C12N5/00,C12R1:91)
CC Description of Artificial Sequence:an artificially synthesized
source
1..24
TactMan
CC probe sequence
CC Label FAM (6-carboxy-fluorescein)
CC Label FAM (6-carboxy-N,N',N'-tetramethylrhodamine) FH
Key Location/Qualifiers
FT misc binding (1)
FT misc binding (24)
FEATURES
source
1..24
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 3.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 425 TGAAGTGGGGAGGAGTGTGGCCT 448
|||||
Db 24 TGAAGTGGGGAGGAGTGTGGCCT 1
|||||

RESULT 17
AR007290
LOCUS AR007290 23 bp DNA linear PAT 04-DEC-1998
DEFINITION Sequence 4 from patent US 5750390.
ACCESSION AR007290
VERSION AR007290.1 GI:3966774
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 23)
AUTHORS Thompson,J.D. and Draper,K.G.
TITLE Method and reagent for treatment of diseases caused by expression
of the bcl-2 gene
JOURNAL Patent: US 5750390-A 4 12-MAY-1998;
FEATURES Location/Qualifiers
source
1..23
/organism="unknown"
/mol_type="unassigned DNA"
Query Match 3.7%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 64 AAGTGTGCGAGAGGGGTACGA 86
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Db      1  AACCTGTCCAGAGGGGTACGA 23

RESULT 18
LOCUS   AR053546/c
DEFINITION Sequence 11 from patent US 5834248.
ACCESSION AR053546
VERSION   AR053546.1 GI:5978408
KEYWORDS
SOURCE   Unknown.
ORGANISM
REFERENCE
AUTHORS
TITLE   Unclassified.
JOURNAL
FEATURES
source   1 (bases 1 to 24)
/mol_type="unknown"
/mol_type="unassigned DNA"

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      417 GGACGGGTGAAGTGGGGGAGGAT 440
Db      24 GGATGGGTGAAGTGGGGGAGGAT 1

RESULT 19
LOCUS   AR065873/c
DEFINITION Sequence 11 from patent US 5849578.
ACCESSION AR065873
VERSION   AR065873.1 GI:5996089
KEYWORDS
SOURCE   Unknown.
ORGANISM
REFERENCE
AUTHORS
TITLE   Unclassified.
JOURNAL
FEATURES
source   1 (bases 1 to 24)
/mol_type="unknown"
/mol_type="unassigned DNA"

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      417 GGACGGGTGAAGTGGGGGAGGAT 440
Db      24 GGATGGGTGAAGTGGGGGAGGAT 1

RESULT 20
LOCUS   AR080355/c
DEFINITION Sequence 11 from patent US 5968770.
ACCESSION AR080355
VERSION   AR080355.1 GI:10007090
KEYWORDS
SOURCE   Unknown.
ORGANISM
REFERENCE
AUTHORS
TITLE   Unclassified.
JOURNAL
FEATURES
source   1 (bases 1 to 24)
/mol_type="unknown"
/mol_type="unassigned DNA"

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      417 GGACGGGTGAAGTGGGGGAGGAT 440
Db      24 GGATGGGTGAAGTGGGGGAGGAT 1

TITLE   Compositions and methods for the treatment and diagnosis of
cardiovascular disease using rchd528 as a target
JOURNAL
FEATURES
source   1..24
Location/Qualifiers
/mol_type="unknown"
/mol_type="unassigned DNA"

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      417 GGACGGGTGAAGTGGGGGAGGAT 440
Db      24 GGATGGGTGAAGTGGGGGAGGAT 1

TITLE   Compositions and methods for the treatment and diagnosis of
cardiovascular disease using rchd534 as a target
JOURNAL
FEATURES
source   1..24
Location/Qualifiers
/mol_type="unknown"
/mol_type="unassigned DNA"

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      417 GGACGGGTGAAGTGGGGGAGGAT 440
Db      24 GGATGGGTGAAGTGGGGGAGGAT 1

TITLE   Compositions and methods for the treatment and diagnosis of
cardiovascular disease using rchd523 as a target
JOURNAL
FEATURES
source   1..24
Location/Qualifiers
/mol_type="unknown"
/mol_type="unassigned DNA"

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      417 GGACGGGTGAAGTGGGGGAGGAT 440
Db      24 GGATGGGTGAAGTGGGGGAGGAT 1

RESULT 21
LOCUS   AR148310/c
DEFINITION Sequence 11 from patent US 6225084.
ACCESSION AR148310
VERSION   AR148310.1 GI:15112400
KEYWORDS
SOURCE   Unknown.
ORGANISM
REFERENCE
AUTHORS
TITLE   Unclassified.
JOURNAL
FEATURES
source   1 (bases 1 to 24)
Location/Qualifiers
/mol_type="unknown"
/mol_type="unassigned DNA"

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      417 GGACGGGTGAAGTGGGGGAGGAT 440
Db      24 GGATGGGTGAAGTGGGGGAGGAT 1

RESULT 22
LOCUS   AR007292
DEFINITION Sequence 6 from patent US 5750390.
ACCESSION AR007292
VERSION   AR007292.1 GI:3966776
KEYWORDS
SOURCE   Unknown.
ORGANISM
REFERENCE
AUTHORS
TITLE   Unclassified.
JOURNAL
FEATURES
source   1 (bases 1 to 22)
Location/Qualifiers
/mol_type="unknown"
/mol_type="unassigned DNA"

Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 36;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      198 CGCCAGGACCTCCCGCTGCAG 219
Db      1 CGCCAGGACCTCCCGCTGCAG 22
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RESULT 23
BD247889
LOCUS
DEFINITION
Antisense oligonucleotide containing universal and/or homonymous
base.
ACCESSION
BD247889
VERSION
BD247889.1 GI:33057659
KEYWORDS
JP 2002541825-A/21.
SOURCE
synthetic construct
ORGANISM
artificial sequences.
REFERENCE
1 (bases 1 to 22)
AUTHORS
Brown,B.D. and Riley,T.A.
TITLE
Antisense oligonucleotide containing universal and/or homonymous
JOURNAL
Patent: JP 2002541825-A 21 10-DEC-2002;
COMMENT
OS Artificial Sequence
PN JP 2002541825-A/21
PD 10-DEC-2002
PF 07-APR-2000 JP 2000611732
PR 08-APR-1999 US 60/128377
PI BOB D BROWN,TIMOTHY A RILEY
PC C12N15/09,C12N9/00,C12N15/00
PP Synthetic oligonucleotide primers
FH Key Location/Qualifiers
FT source
1..22
Location/Qualifiers
/organism='Artificial Sequence'.
FEATURES
source
1..22
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 36;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 264 GGTGCCACCTGTGGTCCACCTG 285
DB 1 GGTGCCACCTGTGGTCCACCTG 22
RESULT 24
AR279805
LOCUS
DEFINITION
Sequence 51 from patent US 6518017.
ACCESSION
AR279805
VERSION
AR279805.1 GI:29714950
KEYWORDS
Unknown.
SOURCE
Unknown.
ORGANISM
Unclassified.
REFERENCE
1 (bases 1 to 22)
AUTHORS
Riley,T.A., Brown,B.D. and Arnold,L.J.
TITLE
Combinatorial antisense library
JOURNAL
Patent: US 6518017-A 51 11-FEB-2003;
FEATURES
source
1..22
Location/Qualifiers
/organism="unknown"
/mol_type="genomic DNA"
Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 36;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 264 GGTGCCACCTGTGGTCCACCTG 285
DB 1 GGTGCCACCTGTGGTCCACCTG 22
RESULT 25

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AX537132
LOCUS
DEFINITION
Sequence 1 from Patent WO02055692.
ACCESSION
AX537132
VERSION
AX537132.1 GI:25263575
KEYWORDS
synthetic construct
SOURCE
artificial sequences.
ORGANISM
synthetic construct
artificial sequences.
REFERENCE
1
AUTHORS
Kreutzer,R., Limmer,S., Vornlocher,H.P., Hadwiger,P., Geick,A.,
Ocker,W., Herold,C. and Schuppan,D.
TITLE
Method for inhibiting the expression of a target gene and
medicament for treating a tumor disease
JOURNAL
Patent: WO 02055692-A 1 18-JUL-2002;
Ribopharma AG (DE)
FEATURES
source
1..22
Location/Qualifiers
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="Sinn-Strang|einer zu einer Sequenz des humanen
Bcl-2-Gens komplement ren dsRNA"
Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 36;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 201 CAGGACCTGCGCGCTGCAGACC 222
DB 1 CAGGACCTGCGCGCTGCAGACC 22
RESULT 26
BD076457
LOCUS
DEFINITION
Combined antisense library.
ACCESSION
BD076457
VERSION
BD076457.1 GI:22622060
KEYWORDS
JP 2001519170-A/51.
SOURCE
synthetic construct
ORGANISM
artificial sequences.
REFERENCE
1 (bases 1 to 22)
AUTHORS
Riley,T.A., Brown,B.D. and Arnold,L.J.
TITLE
Combined antisense library
JOURNAL
Patent: JP 2001519170-A 51 23-OCT-2001;
COMMENT
OS BIOSCIENCES INC
PN JP 2001519170-A/51
PD 23-OCT-2001
PP 28-SEP-1998 JP 2000515030
PR 02-OCT-1997 US 60/060673 18-AUG-1998 US 09/136080 PI
TIMOTHY A RILEY,BOB D BROWN,LYLE J ARNOLD
PC C12Q1/68,C07H21/04,C12N15/09,C12P19/34,C12N15/00 CC
synthetic oligonucleotide
FH Key Location/Qualifiers
FT source
1..22
Location/Qualifiers
/organism='Artificial Sequence'.
FEATURES
source
1..22
Location/Qualifiers
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 36;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 264 GGTGCCACCTGTGGTCCACCTG 285
DB 1 GGTGCCACCTGTGGTCCACCTG 22

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RESULT 27
A82351
LOCUS       A82351             20 bp      DNA          linear      PAT 21-JAN-2000
DEFINITION   Sequence 1 from Patent WO9856905.
ACCESSION   A82351
VERSION     A82351.1  GI:6732124
KEYWORDS    unidentified
SOURCE      unidentified
ORGANISM    unidentified
REFERENCE    1 (bases 1 to 20)
AUTHORS     Fabbro,D. and Altmann,K.
TITLE       OLIGONUCLEOTIDE DERIVATIVES
JOURNAL     NOVARTIS ERFINDEUNGEN VERWALTUN (AT); NOVARTIS AG (CH)
FEATURES    source
            1..20
            /organism="unidentified"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32644"

Query Match      3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      422 GGGTGAAGTGGGGAGGATT 441
Db      1 GGGTGAAGTGGGGAGGATT 20

RESULT 28
A82353/c
LOCUS       A82353             20 bp      DNA          linear      PAT 21-JAN-2000
DEFINITION   Sequence 3 from Patent WO9856905.
ACCESSION   A82353
VERSION     A82353.1  GI:6732126
KEYWORDS    unidentified
SOURCE      unidentified
ORGANISM    unidentified
REFERENCE    1 (bases 1 to 20)
AUTHORS     Fabbro,D. and Altmann,K.
TITLE       OLIGONUCLEOTIDE DERIVATIVES
JOURNAL     NOVARTIS ERFINDEUNGEN VERWALTUN (AT); NOVARTIS AG (CH)
FEATURES    source
            1..20
            /organism="unidentified"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32644"

Query Match      3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      422 GGGTGAAGTGGGGAGGATT 441
Db      1 GGGTGAAGTGGGGAGGATT 20

RESULT 29
A821161
LOCUS       A821161             20 bp      DNA          linear      PAT 05-DEC-1998
DEFINITION   Sequence 13 from patent US 5789389.
ACCESSION   A821161
VERSION     A821161.1  GI:3975776
KEYWORDS    Unknown.
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE    1 (bases 1 to 20)
AUTHORS     Tarasiewicz,D.G., Schott,B., Holzmayer,T.A. and Roninson,I.B.
TITLE       Tarasiewicz,D.G., Schott,B., Holzmayer,T.A. and Roninson,I.B.
JOURNAL
FEATURES

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TITLE       BCL2 derived genetic elements associated with sensitivity to
             chemotherapeutic drugs
JOURNAL     Patent: US 5789389-A 13 04-AUG-1998;
FEATURES    Location/Qualifiers
            source
            1..20
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      442 GTGGCTTCTTTGAGTTCGG 461
Db      1 GTGGCTTCTTTGAGTTCGG 20

RESULT 30
AR052605/c
LOCUS       AR052605             20 bp      DNA          linear      PAT 29-SEP-1999
DEFINITION   Sequence 3 from patent US 5831066.
ACCESSION   AR052605
VERSION     AR052605.1  GI:5975969
KEYWORDS    Unknown.
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE    1 (bases 1 to 20)
AUTHORS     Reed,J.C.
TITLE       Regulation of bcl-2 gene expression
JOURNAL     Patent: US 5831066-A 3 03-NOV-1998;
FEATURES    Location/Qualifiers
            1..20
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      577 GGAGGCTGGTAGTGCATC 596
Db      20 GGAGGCTGGTAGTGCATC 1

RESULT 31
AR170718
LOCUS       AR170718             20 bp      DNA          linear      PAT 17-DEC-2001
DEFINITION   Sequence 1 from patent US 6291668.
ACCESSION   AR170718
VERSION     AR170718.1  GI:17908677
KEYWORDS    Unknown.
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE    1 (bases 1 to 20)
AUTHORS     Ziegler,A., Zangemeister-Wittke,U., Fabbro,D. and Altmann,K.-H.
TITLE       Oligonucleotide derivatives
JOURNAL     Patent: US 6291668-A 1 18-SEP-2001;
FEATURES    Location/Qualifiers
            1..20
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      422 GGGTGAAGTGGGGAGGATT 441
Db      1 GGGTGAAGTGGGGAGGATT 20

```



```
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 235 GCGCGCGCGCGGGCGCTGC 254
Db 1 GCGCGCGCGCGGGCGCTGC 20

RESULT 37
AX224973 AX224973 20 bp DNA linear PAT 10-SEP-2001
LOCUS Sequence 127 from Patent WO0161030.
DEFINITION AX224973
ACCESSION AX224973
VERSION AX224973.1 GI:15555046
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
for control of gene expression
JOURNAL Patent: WO 0161030-A 127 23-AUG-2001;
Cytoclonal Pharmaceuticals, Inc. (US) ; University of Texas at
Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
FEATURES
Location/Qualifiers
source 1..20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 236 GCGCGCGCGCGGGCGCTGC 255
Db 1 GCGCGCGCGCGGGCGCTGC 20

RESULT 38
AX224974 AX224974 20 bp DNA linear PAT 10-SEP-2001
LOCUS Sequence 128 from Patent WO0161030.
DEFINITION AX224974
ACCESSION AX224974
VERSION AX224974.1 GI:15555047
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
for control of gene expression
JOURNAL Patent: WO 0161030-A 128 23-AUG-2001;
Cytoclonal Pharmaceuticals, Inc. (US) ; University of Texas at
Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
FEATURES
Location/Qualifiers
source 1..20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 232 CCGCGCGCGCGGGCGGCC 251
Db 1 CCGCGCGCGCGGGCGGCC 20
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RESULT 39
AX224975 AX224975 20 bp DNA linear PAT 10-SEP-2001
LOCUS Sequence 129 from Patent WO0161030.
DEFINITION AX224975
ACCESSION AX224975
VERSION AX224975.1 GI:15555048
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
for control of gene expression
JOURNAL Patent: WO 0161030-A 129 23-AUG-2001;
Cytoclonal Pharmaceuticals, Inc. (US) ; University of Texas at
Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
FEATURES
Location/Qualifiers
source 1..20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 237 GCGCGCGCGGGCGCTGC 256
Db 1 GCGCGCGCGGGCGCTGC 20

RESULT 40
AX224976 AX224976 20 bp DNA linear PAT 10-SEP-2001
LOCUS Sequence 130 from Patent WO0161030.
DEFINITION AX224976
ACCESSION AX224976
VERSION AX224976.1 GI:15555049
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
for control of gene expression
JOURNAL Patent: WO 0161030-A 130 23-AUG-2001;
Cytoclonal Pharmaceuticals, Inc. (US) ; University of Texas at
Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
FEATURES
Location/Qualifiers
source 1..20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 233 CCGCGCGCGCGGGCGCCT 252
Db 1 CCGCGCGCGCGGGCGCCT 20

RESULT 41
AX224977 AX224977 20 bp DNA linear PAT 10-SEP-2001
LOCUS
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DEFINITION      Sequence 131 from Patent WO0161030.
ACCESSION       AX224977
VERSION         AX224977.1  GI:15555050
KEYWORDS
SOURCE          Homo sapiens (human)
ORGANISM        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS        Gray,D.M. and Bollon,A.P.
TITLE          Libraries of optimum subsequence regions of mrna and genomic dna
              for control of gene expression
JOURNAL        Patent: WO 0161030-A 131 23-AUG-2001;
              Cytoclonal Pharmaceuticals, Inc. (US) ; University of Texas at
              Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
              Experimental Carcinogenesis, National Cancer Institute/NIH (US)
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VERSION       AX224978.1  GI:15555051
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SOURCE        Homo sapiens (human)
ORGANISM      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS        Gray,D.M. and Bollon,A.P.
TITLE          Libraries of optimum subsequence regions of mrna and genomic dna
              for control of gene expression
JOURNAL        Patent: WO 0161030-A 132 23-AUG-2001;
              Cytoclonal Pharmaceuticals, Inc. (US) ; University of Texas at
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Db 1 GCGCGGGCGCTCGCTCAG 20
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VERSION       AX224979.1  GI:15555052
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ORGANISM      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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DEFINITION      Sequence 131 from Patent WO0161030.
ACCESSION       AX224977
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ORGANISM        Homo sapiens
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS        Gray,D.M. and Bollon,A.P.
TITLE          Libraries of optimum subsequence regions of mrna and genomic dna
              for control of gene expression
JOURNAL        Patent: WO 0161030-A 131 23-AUG-2001;
              Cytoclonal Pharmaceuticals, Inc. (US) ; University of Texas at
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VERSION       AX224981.1  GI:15555054
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS        Gray,D.M. and Bollon,A.P.

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TITLE Libraries of optimum subsequence regions of mrna and genomic dna
JOURNAL Patent: WO 0161030-A 135 23-AUG-2001; University of Texas at
 Cytoclonal Pharmaceuticals, Inc. (US); Lab. of
 Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
 Experimental Carcinogenesis, National Cancer Institute/NIH (US)

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RESULT 46
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ACCESSION AX224982
VERSION AX224982.1 GI:15555055
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
JOURNAL Patent: WO 0161030-A 136 23-AUG-2001; University of Texas at
 Cytoclonal Pharmaceuticals, Inc. (US); Lab. of
 Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
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RESULT 47
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DEFINITION Sequence 137 from Patent WO0161030.
ACCESSION AX224983
VERSION AX224983.1 GI:15555056
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
JOURNAL Patent: WO 0161030-A 137 23-AUG-2001; University of Texas at
 Cytoclonal Pharmaceuticals, Inc. (US); Lab. of
 Dallas, Dept. of Molecular and Cell Biology (US); Lab. of

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ACCESSION AX224984
VERSION AX224984.1 GI:15555057
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
JOURNAL Patent: WO 0161030-A 138 23-AUG-2001; University of Texas at
 Cytoclonal Pharmaceuticals, Inc. (US); Lab. of
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 Experimental Carcinogenesis, National Cancer Institute/NIH (US)

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Db 1 CCGCGGGGCTGGCTCAGC 20

RESULT 49
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ACCESSION AX224985
VERSION AX224985.1 GI:15555058
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SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
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REFERENCE
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
JOURNAL Patent: WO 0161030-A 139 23-AUG-2001; University of Texas at
 Cytoclonal Pharmaceuticals, Inc. (US); Lab. of
 Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
 Experimental Carcinogenesis, National Cancer Institute/NIH (US)

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ACCESSION		BD144225									
VERSION		BD144225.1 GI:27849983									
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SOURCE		synthetic construct									
ORGANISM		synthetic construct									
REFERENCE		1 (bases 1 to 20)									
AUTHORS		Sugita,Y., Hashida,R., Ogawa,K., Fujishima,T. and Tsujimoto,K.									
TITLE		Method for examining allergic diseases									
JOURNAL		Patent: JP 2002119281-A 13 23-APR-2002;									
COMMENT		GENOX RESEARCH INC,THE DIRECTOR OF NATIONAL CHILDREN'S HOSPITAL									
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PI		YUJI SUGITA, RYOICHI HASHIDA, KAORU OGAWA, TOMOKO FUJISHIMA, KOZO									
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VERSION		BD144226.1 GI:27849984									
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SOURCE		synthetic construct									
ORGANISM		artificial sequences.									
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AUTHORS		Sugita,Y., Hashida,R., Ogawa,K., Fujishima,T. and Tsujimoto,K.									
TITLE		Method for examining allergic diseases									
JOURNAL		Patent: JP 2002119281-A 14 23-APR-2002;									
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VERSION		BD144225.1 GI:27849983									
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SOURCE		synthetic construct									
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ACCESSION		BD144226									
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SOURCE		synthetic construct									
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AUTHORS		Sugita,Y., Hashida,R., Ogawa,K., Fujishima,T. and Tsujimoto,K.									
TITLE		Method for examining allergic diseases									
JOURNAL		Patent: JP 2002119281-A 14 23-APR-2002;									
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PI		YUJI SUGITA, RYOICHI HASHIDA, KAORU OGAWA, TOMOKO FUJISHIMA, KOZO									
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SOURCE		synthetic construct									
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JOURNAL		Patent: JP 2002119281-A 14 23-APR-2002;									
COMMENT		GENOX RESEARCH INC,THE DIRECTOR OF NATIONAL CHILDREN'S HOSPITAL									
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ACCESSION		BD144225									
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PC		C12Q1/02, C12Q1/68, G01N33/15, G01N33/50// (C12N15/09, C12R1:91),									
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TITLE		Method for examining allergic diseases									
JOURNAL		Patent: JP 2002119281-A 14 23-APR-2002;									
COMMENT		GENOX RESEARCH INC,THE DIRECTOR OF NATIONAL CHILDREN'S HOSPITAL									
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ACCESSION		BD144225									
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TITLE		Method for examining allergic diseases									
JOURNAL		Patent: JP 2002119281-A 13 23-APR-2002;									
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PC		C12N5/10,									
PC		C12Q1/02, C12Q1/68, G01N33/15, G01N33/50// (C12N15/09, C12R1:91),									
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PC		(C12N15/00, C12R1:91), (C12N5/00, C12R1:91)									
CC		Description of Artificial Sequence:an artificially synthesized									
Query Match											
Best Local Similarity		100.0%;		Pred. No. 50;		Length 20;					
Matches		20;		Conservative		0; Mismatches					
						0; Indels					
						0; Gaps					
						0;					
QY	401	TGGAGGAGCTCTTCAGGGAC 420									
Db											
	1	TGGAGGAGCTCTTCAGGGAC 20									
RESULT 56											
AR007297		19 bp		DNA		PAT 04-DEC-1998					
LOCUS											
DEFINITION		Sequence 11 from patent US 5750390.									
ACCESSION		AR007297									
VERSION		AR007297.1 GI:39666781									
KEYWORDS		Unknown.									
SOURCE		Unknown.									
ORGANISM		Unclassified.									
REFERENCE		1 (bases 1 to 19)									
AUTHORS		Thompson,J.D. and Draper,K.G.									
TITLE		Method and reagent for treatment of diseases caused by expression									
JOURNAL		of the bcl-2 gene									
FEATURES		Patent: US 5750390-A 11 12-MAY-1998;									
source		Location/Qualifiers									
		1..19									
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		/mol_type="unassigned DNA"									
Query Match											
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Matches		19;		Conservative		0; Mismatches					
						0; Indels					
						0; Gaps					
						0;					
QY	349	AGCCAGCTGCACCTGACGC 367									
Db											
	1	AGCCAGCTGCACCTGACGC 19									
RESULT 57											
AR007298		19 bp		DNA		PAT 04-DEC-1998					
LOCUS											
DEFINITION		Sequence 12 from patent US 5750390.									
ACCESSION		AR007298									
VERSION		AR007298.1 GI:39666782									
KEYWORDS		Unknown.									
SOURCE		Unknown.									
ORGANISM		Unclassified.									
REFERENCE		1 (bases 1 to 19)									
AUTHORS		Thompson,J.D. and Draper,K.G.									
TITLE		Method and reagent for treatment of diseases caused by expression									

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of the bcl-2 gene
Patent: US 5750390-A 12 12-MAY-1998;
FEATURES
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        1..19
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 378 GCGGGACGCTTGGCAG 396
Db 1 GCGGGACGCTTGGCAG 19

RESULT 58
AR007300
LOCUS AR007300 19 bp DNA linear PAT 04-DEC-1998
DEFINITION Sequence 14 from patent US 5750390.
ACCESSION AR007300
VERSION AR007300.1 GI:3966784
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Thompson,J.D. and Draper,K.G.
TITLE Method and reagent for treatment of diseases caused by expression
of the bcl-2 gene
JOURNAL Patent: US 5750390-A 14 12-MAY-1998;
FEATURES
    source
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        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 514 AACATGCGCCCTGTGGATGA 532
Db 1 AACATGCGCCCTGTGGATGA 19

RESULT 59
AR224989
LOCUS AR224989 20 bp DNA linear PAT 10-SEP-2001
DEFINITION Sequence 143 from Patent WO0161030.
ACCESSION AR224989
VERSION AR224989.1 GI:15555062
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
for control of gene expression
JOURNAL Patent: WO 0161030-A 143 23-AUG-2001;
Dallias, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
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Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

of the bcl-2 gene
Patent: US 5750390-A 12 12-MAY-1998;
FEATURES
    source
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        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 378 GCGGGACGCTTGGCAG 396
Db 1 GCGGGACGCTTGGCAG 19

RESULT 58
AR007300
LOCUS AR007300 19 bp DNA linear PAT 04-DEC-1998
DEFINITION Sequence 14 from patent US 5750390.
ACCESSION AR007300
VERSION AR007300.1 GI:3966784
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Thompson,J.D. and Draper,K.G.
TITLE Method and reagent for treatment of diseases caused by expression
of the bcl-2 gene
JOURNAL Patent: US 5750390-A 14 12-MAY-1998;
FEATURES
    source
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        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 514 AACATGCGCCCTGTGGATGA 532
Db 1 AACATGCGCCCTGTGGATGA 19

RESULT 59
AR224989
LOCUS AR224989 20 bp DNA linear PAT 10-SEP-2001
DEFINITION Sequence 143 from Patent WO0161030.
ACCESSION AR224989
VERSION AR224989.1 GI:15555062
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
for control of gene expression
JOURNAL Patent: WO 0161030-A 143 23-AUG-2001;
Dallias, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
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Best Local Similarity 3.1%; Score 19; DB 1; Length 20;
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of the bcl-2 gene
Patent: US 5750390-A 12 12-MAY-1998;
FEATURES
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        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 378 GCGGGACGCTTGGCAG 396
Db 1 GCGGGACGCTTGGCAG 19

RESULT 58
AR007300
LOCUS AR007300 19 bp DNA linear PAT 04-DEC-1998
DEFINITION Sequence 14 from patent US 5750390.
ACCESSION AR007300
VERSION AR007300.1 GI:3966784
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Thompson,J.D. and Draper,K.G.
TITLE Method and reagent for treatment of diseases caused by expression
of the bcl-2 gene
JOURNAL Patent: US 5750390-A 14 12-MAY-1998;
FEATURES
    source
        1..19
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 514 AACATGCGCCCTGTGGATGA 532
Db 1 AACATGCGCCCTGTGGATGA 19

RESULT 59
AR224989
LOCUS AR224989 20 bp DNA linear PAT 10-SEP-2001
DEFINITION Sequence 143 from Patent WO0161030.
ACCESSION AR224989
VERSION AR224989.1 GI:15555062
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
for control of gene expression
JOURNAL Patent: WO 0161030-A 143 23-AUG-2001;
Dallias, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
FEATURES
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        /mol_type="unassigned DNA"

Query Match
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Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

of the bcl-2 gene
Patent: US 5750390-A 12 12-MAY-1998;
FEATURES
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        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 378 GCGGGACGCTTGGCAG 396
Db 1 GCGGGACGCTTGGCAG 19

RESULT 58
AR007300
LOCUS AR007300 19 bp DNA linear PAT 04-DEC-1998
DEFINITION Sequence 14 from patent US 5750390.
ACCESSION AR007300
VERSION AR007300.1 GI:3966784
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Thompson,J.D. and Draper,K.G.
TITLE Method and reagent for treatment of diseases caused by expression
of the bcl-2 gene
JOURNAL Patent: US 5750390-A 14 12-MAY-1998;
FEATURES
    source
        1..19
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 514 AACATGCGCCCTGTGGATGA 532
Db 1 AACATGCGCCCTGTGGATGA 19

RESULT 59
AR224989
LOCUS AR224989 20 bp DNA linear PAT 10-SEP-2001
DEFINITION Sequence 143 from Patent WO0161030.
ACCESSION AR224989
VERSION AR224989.1 GI:15555062
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
for control of gene expression
JOURNAL Patent: WO 0161030-A 143 23-AUG-2001;
Dallias, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
FEATURES
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Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

of the bcl-2 gene
Patent: US 5750390-A 12 12-MAY-1998;
FEATURES
    source
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        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.1%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 378 GCGGGACGCTTGGCAG 396
Db 1 GCGGGACGCTTGGCAG 19

RESULT 58
AR007300
LOCUS AR007300 19 bp DNA linear PAT 04-DEC-1998
DEFINITION Sequence 14 from patent US 5750390.
ACCESSION AR007300
VERSION AR007300.1 GI:3966784
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Thompson,J.D. and Draper,K.G.
TITLE Method and reagent for treatment of diseases caused by expression
of the bcl-2 gene
JOURNAL Patent: US 5750390-A 14 12-MAY-1998;
FEATURES
    source
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        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 3.0%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 152 CCAGCCCGGGCAGCGCC 171
Db 1 CGCAGCCCGGGCAGCGCC 20

RESULT 61
AR052619/c
LOCUS AR052619 18 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 17 from patent US 5831066.
ACCESSION AR052619
VERSION AR052619.1 GI:5975983
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Reed,J.C.
TITLE Regulation of bcl-2 gene expression
JOURNAL Patent: US 5831066-A 17 03-NOV-1998;
FEATURES
    source
        1..18
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 62
AR052624/c
LOCUS AR052624 18 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 24 from patent US 5831066.
ACCESSION AR052624

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VERSION AR052624.1 GI:5975988
KEYWORDS
SOURCE Unknown.
ORGANISM Unassigned.

REFERENCE
1 (bases 1 to 18)
Unclassified.
AUTHORS Reed,J.C.
TITLE Regulation of bcl-2 gene expression
JOURNAL Patent: US 5831066-A 24 03-NOV-1998;
FEATURES Location/Qualifiers
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source /organism="unknown"
/mol_type="unassigned DNA"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 63
AR116926/c
LOCUS AR116926 18 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 1 from patent US 6140051.
ACCESSION AR116926
VERSION AR116926.1 GI:14097832
KEYWORDS
SOURCE Unknown.
ORGANISM Unassigned.

REFERENCE
1 (bases 1 to 18)
Unclassified.
AUTHORS Brown,L.R. and Xu,C.
TITLE Fluorescent dibenzazole derivatives and methods related thereto
JOURNAL Patent: US 6140051-A 1 31-OCT-2000;
FEATURES Location/Qualifiers
1..18
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/mol_type="unassigned DNA"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 64
AR140496/c
LOCUS AR140496 18 bp DNA linear PAT 16-JUN-2001
DEFINITION Sequence 55 from patent US 6207646.
ACCESSION AR140496
VERSION AR140496.1 GI:14482992
KEYWORDS
SOURCE Unknown.
ORGANISM Unassigned.

REFERENCE
1 (bases 1 to 18)
Unclassified.
AUTHORS Krieg,A.M., Kline,J., Klinman,D. and Steinberg,A.D.
TITLE Immunostimulatory nucleic acid molecules
JOURNAL Patent: US 6207646-A 55 27-MAR-2001;
FEATURES Location/Qualifiers
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Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 65
AR146347/c
LOCUS AR146347 18 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 59 from patent US 6218371.
ACCESSION AR146347
VERSION AR146347.1 GI:15109536
KEYWORDS
SOURCE Unknown.
ORGANISM Unassigned.

REFERENCE
1 (bases 1 to 18)
Unclassified.
AUTHORS Krieg,A.M. and Weiner,G.
TITLE Methods and products for stimulating the immune system using
immunotherapeutic oligonucleotides and cytokines
JOURNAL Patent: US 6218371-A 59 17-APR-2001;
FEATURES Location/Qualifiers
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Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 66
AR146392/c
LOCUS AR146392 18 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 104 from patent US 6218371.
ACCESSION AR146392
VERSION AR146392.1 GI:15109581
KEYWORDS
SOURCE Unknown.
ORGANISM Unassigned.

REFERENCE
1 (bases 1 to 18)
Unclassified.
AUTHORS Krieg,A.M. and Weiner,G.
TITLE Methods and products for stimulating the immune system using
immunotherapeutic oligonucleotides and cytokines
JOURNAL Patent: US 6218371-A 104 17-APR-2001;
FEATURES Location/Qualifiers
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source /organism="unknown"
/mol_type="unassigned DNA"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 67
AR154716/c
LOCUS AR154716 18 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 45 from patent US 6239116.
ACCESSION AR154716
VERSION AR154716.1 GI:15122769
KEYWORDS
SOURCE Unknown.
ORGANISM Unassigned.
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REFERENCE
1 (bases 1 to 18)
Krieg, A.M. and Kline, J.N.
Immunostimulatory nucleic acid molecules
JOURNAL
Patent: US 6239116-A 45 29-MAY-2001;
FEATURES
source
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/organism="unknown"
/mol_type="unassigned DNA"

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 68
AR167448/c
LOCUS
AR167448 18 bp DNA linear PAT 17-DEC-2001
DEFINITION
Sequence 14 from patent US 6287591.
ACCESSION
AR167448
VERSION
AR167448.1 GI:17903228
KEYWORDS
Unknown.
ORGANISM
Unclassified.
REFERENCE
1 (bases 1 to 18)
Semple, S.C., Klimuk, S.K., Harasym, T., Hope, M.J., Ansell, S.M.,
Cullis, P., Scherrer, P. and DeBeyer, D.
Charged therapeutic agents encapsulated in lipid particles
containing four lipid components
JOURNAL
Patent: US 6287591-A 14 11-SEP-2001;
FEATURES
source
1..18
/organism="unknown"
/mol_type="unassigned DNA"

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 69
BD228692/c
LOCUS
BD228692 18 bp DNA linear PAT 17-JUL-2003
DEFINITION
Methods and adjuvants for stimulating mucosal immunity.
ACCESSION
BD228692
VERSION
BD228692.1 GI:33038462
KEYWORDS
JP 2002526425-A/21.
SOURCE
unidentified
ORGANISM
unclassified.
REFERENCE
1 (bases 1 to 18)
Raz, E., Horner, A.A. and Carson, D.A.
Methods and adjuvants for stimulating mucosal immunity
JOURNAL
Patent: JP 2002526425-A 21 20-AUG-2002;
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
OS
unidentified
PN JP 2002526425-A/21
PD 20-AUG-2002
PF 15-SEP-1999 JP 2000573397
PR 05-OCT-1998 US 09/167039
PI EVAL RAZ, ANTHONY A HORNER, DENNIS A CARSON
PC A61K39/39 A61K31/7088 A61K31/711 A61P11/00 PC
A61P27/14 A61P37/04,
PC C12N15/09 G01N33/15 G01N33/50 C12N5/10 G01N33/531 C12N15/00,

Unclassified.
1 (bases 1 to 18)
Krieg, A.M. and Kline, J.N.
Immunostimulatory nucleic acid molecules
JOURNAL
Patent: US 6239116-A 45 29-MAY-2001;
FEATURES
source
1..18
/organism="unknown"
/mol_type="unassigned DNA"

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 70
BD247888/c
LOCUS
BD247888 18 bp DNA linear PAT 17-JUL-2003
DEFINITION
Antisense oligonucleotide containing universal and/or homonymous
base.
ACCESSION
BD247888
VERSION
BD247888.1 GI:33057658
KEYWORDS
JP 2002541825-A/20.
SOURCE
synthetic construct
ORGANISM
artificial sequences.
REFERENCE
1 (bases 1 to 18)
Brown, B.D. and Riley, T.A.
Antisense oligonucleotide containing universal and/or homonymous
JOURNAL
Patent: JP 2002541825-A 20 10-DEC-2002;
OASIS BIOSCIENCES INC
OS
Artificial Sequence
PN JP 2002541825-A/20
PD 10-DEC-2002 JP 2000611732
PF 07-APR-2000 JP 60/128377
PR BOB D BROWN, TIMOTHY A RILEY
PC C12N15/09, C12N9/00, C12N15/00
CC Synthetic oligonucleotide primers
FEATURES
source
1..18
/organism="Artificial Sequence".

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 71
BD251268/c
LOCUS
BD251268 18 bp DNA linear PAT 17-JUL-2003
DEFINITION
Enhancement of Neisseria antigen bactericidal activity using CG
motif-containing oligonucleotide.
ACCESSION
BD251268
VERSION
BD251268.1 GI:33061038
KEYWORDS
JP 2002537353-A/4.
SOURCE
synthetic construct
ORGANISM
artificial sequences.

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REFERENCE
AUTHORS      Grandi,G., Rappuoli,R., Giuliani,M.M. and Pizzza,M.
TITLE        Enhancement of Neisseria antigen bactericidal activity using CG
JOURNAL      Patent: JP 2002537353-A 4 05-NOV-2002;
              CHIRON SPA
COMMENT      OS Artificial Sequence
              PN JP 2002537353-A/4
              PD 05-NOV-2002
              PF 09-FEB-2000 JP 2000600685
              PR 26-FEB-1999 US 60/121792
              PI GUIDO GRANDI,RINO RAPPUOLI,MARZIA MONICA GIULIANI,MARIAGRAZIA
              PIZZAZZA
              PC A61K39/095,A61K31/7089,A61K39/39,A61P31/04//C07K14/22,C12N15/
              09,C12N15/00
              CC oligonucleotide adjuvant
              FH Key
              FT source
              FT Location/Qualifiers
              FT 1..18
              FT /organism='Artificial Sequence'.
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source
1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
RESULT 72
BD261111/c
LOCUS      18 bp DNA linear PAT 17-JUL-2003
DEFINITION Methods and products for stimulating the immune system using
            immunotherapeutic oligonucleotides and cytokines.
ACCESSION  BD261111.1 GI:33070981
VERSION     JP 2002510644-A/59.
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.
REFERENCE  1 (bases 1 to 18)
AUTHORS    Krieg,A.M. and Weiner,G.
TITLE      Methods and products for stimulating the immune system using
            immunotherapeutic oligonucleotides and cytokines
JOURNAL    Patent: JP 2002510644-A 59 09-APR-2002;
            UNIVERSITY OF IOWA RESEARCH FOUNDATION
COMMENT    OS Artificial Sequence
            PN JP 2002510644-A/59
            PD 09-APR-2002
            PF 02-APR-1999 JP 2000542030
            PR 03-APR-1998 US 60/080729
            PI ARTHUR M KRIEG,GEORGE WEINER
            PC A61K38/00,A61K31/7088,A61K39/00,A61P15/00,A61P35/00,A61P37/04,
            A61K37/02
            CC Synthetic Sequence
            FH Key
            FT source
            FT Location/Qualifiers
            FT 1..18
            FT /organism='Artificial Sequence'.
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/organism="synthetic construct"
/mol_type="genomic DNA"
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Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
RESULT 73
BD261156/c
LOCUS      18 bp DNA linear PAT 17-JUL-2003
DEFINITION Methods and products for stimulating the immune system using
            immunotherapeutic oligonucleotides and cytokines.
ACCESSION  BD261156.1 GI:33070926
VERSION     JP 2002510644-A/104.
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.
REFERENCE  1 (bases 1 to 18)
AUTHORS    Krieg,A.M. and Weiner,G.
TITLE      Methods and products for stimulating the immune system using
            immunotherapeutic oligonucleotides and cytokines
JOURNAL    Patent: JP 2002510644-A 104 09-APR-2002;
            UNIVERSITY OF IOWA RESEARCH FOUNDATION
COMMENT    OS Artificial Sequence
            PN JP 2002510644-A/104
            PD 09-APR-2002
            PF 02-APR-1999 JP 2000542030
            PR 03-APR-1998 US 60/080729
            PI ARTHUR M KRIEG,GEORGE WEINER
            PC A61K38/00,A61K31/7088,A61K39/00,A61P15/00,A61P35/00,A61P37/04,
            A61K37/02
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            FT Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
RESULT 74
BD261272/c
LOCUS      18 bp DNA linear PAT 17-JUL-2003
DEFINITION Methods and products for inducing mucosal immunity.
ACCESSION  BD261272.1 GI:33071042
VERSION     JP 2002516294-A/51.
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.
REFERENCE  1 (bases 1 to 18)
AUTHORS    Mccluskie,M.J. and Davis,H.L.
TITLE      Methods and products for inducing mucosal immunity
JOURNAL    Patent: JP 2002516294-A 51 04-JUN-2002;
            LOEB HEALTH RESEARCH INSTITUTE AT THE OTTAWA HOSPITAL, CORY
            PHARMACEUTICALS GROUP INC
COMMENT    OS Artificial Sequence
            PN JP 2002516294-A/51
            PD 04-JUN-2002
            PF 21-MAY-1999 JP 2000550515
            PR 22-MAY-1998 US 60/086393
            PI MICHAEL J MCCLUSKIE,HEATHER L DAVIS
            PC A61K39/00,A61K9/10,A61K9/16,A61K9/50,A61K9/51,A61K31/70,A61K39/
            PC

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PC A61P33/00//
PC C12N15/09,A61K37/02,A61K37/24,C12N15/00
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Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
    |||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 78
AR213851/c
LOCUS AR213851 18 bp DNA linear PAT 17-JUL-2003
DEFINITION Stereoisomer of CpG oligonucleotide and method relating thereto.
ACCESSION BD270778
VERSION BD270778.1 GI:33080546
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Krieg,A.M.
TITLE Stereoisomer of CpG oligonucleotide and method relating thereto
JOURNAL Patent: JP 2002521489-A 51 16-JUL-2002;
UNIVERSITY OF IOWA RESEARCH FOUNDATION
COMMENT OS Artificial Sequence
PN JP 2002521489-A/51
PD 15-JUL-2002
PF 27-JUL-1999 JP 2000562385
PR 27-JUL-1998 US 60/094370
PI ARTHUR M KRIEG
PC A61K31/711,A61P11/06,A61P17/00,A61P27/02,A61P29/00,A61P31/00,
PC A61P31/00,
PC A61P35/00,A61P37/04,A61P37/06,A61P37/08
CC Synthetic
FH Key Location/Qualifiers
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    /db_xref='taxon:32630'

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Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
    |||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 79
I96098/c
LOCUS I96098 18 bp DNA linear PAT 01-DEC-1998
DEFINITION Sequence 17 from patent US 5734033.
ACCESSION I96098
VERSION I96098.1 GI:3940568
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.

Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Reed,J.
TITLE Antisense oligonucleotides inhibiting human bcl-2 gene expression
JOURNAL Patent: US 5734033-A 17 31-MAR-1998;
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Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
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Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 80
AR213851/c
LOCUS AR213851 18 bp DNA linear PAT 25-SEP-2002
DEFINITION Sequence 51 from patent US 6406705.
ACCESSION AR213851
VERSION AR213851.1 GI:23311250
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 18)
AUTHORS Davis,H.L., Schorr,J. and Krieg,A.M.
TITLE Use of nucleic acids containing unmethylated CpG dinucleotide as an
JOURNAL Patent: US 6406705-A 51 18-JUN-2002;
FEATURES
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    /mol_type='genomic DNA'

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
    |||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 81
AR222219/c
LOCUS AR222219 18 bp DNA linear PAT 26-SEP-2002
DEFINITION Sequence 53 from patent US 6429199.
ACCESSION AR222219
VERSION AR222219.1 GI:23329684
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 18)
AUTHORS Krieg,A.M. and Hartmann,G.
TITLE Immunostimulatory nucleic acid molecules for activating dendritic
JOURNAL Patent: US 6429199-A 53 06-AUG-2002;
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Query Match 2.9%; Score 18; DB 1; Length 18;
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Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      18 ATGGCGCACGCTGGGAGA 1
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RESULT 82
AR279799/c
LOCUS      AR279799          18 bp      DNA      linear      PAT 10-APR-2003
DEFINITION Sequence 45 from patent US 6518017.
ACCESSION  AR279799
VERSION     AR279799.1  GI:29714944
KEYWORDS
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 18)
AUTHORS     Riley,T.A., Brown,B.D. and Arnold,L.J.
TITLE       Combinatorial antisense library
JOURNAL     Patent: US 6518017-A 45 11-FEB-2003;
            Location/Qualifiers
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Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
|||||
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 83
AR303119/c
LOCUS      AR303119          18 bp      DNA      linear      PAT 12-JUN-2003
DEFINITION Sequence 2 from patent US 6544518.
ACCESSION  AR303119
VERSION     AR303119.1  GI:31691791
KEYWORDS
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 18)
AUTHORS     Friede,M., Garcon,N., Gerard,C.M.G. and Hermand,P.
TITLE       Vaccines
JOURNAL     Patent: US 6544518-A 2 08-APR-2003;
            Location/Qualifiers
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Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
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Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 84
AR309880/c
LOCUS      AR309880          18 bp      DNA      linear      PAT 12-JUN-2003
DEFINITION Sequence 2 from patent US 6558670.
ACCESSION  AR309880
VERSION     AR309880.1  GI:31702012
KEYWORDS
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 18)
AUTHORS     Friede,M. and Hermand,P.
TITLE       Vaccine adjuvants
            source
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            /organism="unknown"
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JOURNAL Patent: US 6558670-A 2 06-MAY-2003;
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Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
|||||
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 85
AR359625/c
LOCUS      AR359625          18 bp      DNA      linear      PAT 17-AUG-2003
DEFINITION Sequence 218 from patent US 6593305.
ACCESSION  AR359625
VERSION     AR359625.1  GI:33766348
KEYWORDS
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 18)
AUTHORS     Wright,J.A.
TITLE       Antitumor antisense sequences directed against R1 and R2 components
            of ribonucleotide reductase
JOURNAL     Patent: US 6593305-A 218 15-JUL-2003;
            Location/Qualifiers
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Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
|||||
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 86
AR432468/c
LOCUS      AR432468          18 bp      DNA      linear      PAT 18-DEC-2003
DEFINITION Sequence 45 from patent US 6653292.
ACCESSION  AR432468
VERSION     AR432468.1  GI:40194803
KEYWORDS
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 18)
AUTHORS     Krieg,A.M. and Weiher,G.
TITLE       Method of treating cancer using immunostimulatory oligonucleotides
JOURNAL     Patent: US 6653292-A 45 25-NOV-2003;
            Location/Qualifiers
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Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
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Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 87
AR432468/c
LOCUS      AR432468          18 bp      DNA      linear      PAT 18-DEC-2003
DEFINITION Sequence 45 from patent US 6653292.
ACCESSION  AR432468
VERSION     AR432468.1  GI:40194803
KEYWORDS
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 18)
AUTHORS     Krieg,A.M. and Weiher,G.
TITLE       Method of treating cancer using immunostimulatory oligonucleotides
JOURNAL     Patent: US 6653292-A 45 25-NOV-2003;
            Location/Qualifiers
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Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
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Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 87

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AX015198/c
LOCUS AX015198 18 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 2 from Patent WO9952549.
ACCESSION AX015198
VERSION AX015198.1 GI:10041241
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Friede,M. and Hermand,P.
TITLE Adjuvant compositions
JOURNAL Patent: WO 9952549-A 2 21-OCT-1999;
SMITHKLINE BEECHAM BIOLOG (BE); FRIEDE MARTIN (BE); HERMAND
PHILIPPE (BE)
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Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1
RESULT 88
AX020948/c
LOCUS AX020948 18 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 25 from Patent WO9933868.
ACCESSION AX020948
VERSION AX020948.1 GI:10044612
KEYWORDS unidentified
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1
AUTHORS Dalemans,W.L. and Gerard,C.M.
TITLE Vaccine
JOURNAL Patent: WO 9933868-A 25 08-JUL-1999;
DALEMANS WILFRIED L J (BE); SMITHKLINE BEECHAM BIOLOG (BE); GERARD
CATHERINE MARIE GHISLAI (BE)
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Db 18 ATGGCGCAGCTGGGAGA 1
RESULT 89
AX020954/c
LOCUS AX020954 18 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 4 from Patent WO9933488.
ACCESSION AX020954
VERSION AX020954.1 GI:10044617
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
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AUTHORS Dalemans,W.L., Prieels,J.P. and Laferriere,C.A.
TITLE Vaccine
JOURNAL Patent: WO 993489-A 4 08-JUL-1999;
DALEMANS WILFRIED L J (BE); PRIEELS JEAN PAUL (BE); SMITHKLINE
BEECHAM BIOLOG (BE); LAFERRIERE CRAIG ANTONY JOSEPH (BE)
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Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1
RESULT 90
AX040169/c
LOCUS AX040169 18 bp DNA linear PAT 18-NOV-2000
DEFINITION Sequence 2 from Patent WO0062800.
ACCESSION AX040169
VERSION AX040169.1 GI:11230119
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Friede,M., Garcon,N. and Hermand,P.
TITLE Adjuvant composition comprising saponin and an immunostimulatory o
ligonucleotide
JOURNAL Patent: WO 0062800-A 2 26-OCT-2000;
SMITHKLINE Beecham Biologicals s.a. (BE)
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Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1
RESULT 91
AX040403/c
LOCUS AX040403 18 bp DNA linear PAT 18-NOV-2000
DEFINITION Sequence 2 from Patent WO0062802.
ACCESSION AX040403
VERSION AX040403.1 GI:11230215
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Deschamps,M.
TITLE Vaccine comprising rsv antigen and cpg oligonucleotide
JOURNAL Patent: WO 0062802-A 2 26-OCT-2000;
SMITHKLINE Beecham Biologicals s.a. (BE)
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Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
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Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 92
AX063576/c
LOCUS      18 bp      DNA      linear      PAT 24-JAN-2001
DEFINITION Sequence 2 from Patent WO0100231.
ACCESSION  AX063576
VERSION     AX063576.1 GI:12541300
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.
REFERENCE  1
AUTHORS    Cohen, J., Garcon, N. and Voss, G.
TITLE      Vaccines
JOURNAL    SMITHKLINE BEECHAM BIOLOGICALS S.A. (BE)
FEATURES   Location/Qualifiers
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Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
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Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 93
AX081353/c
LOCUS      18 bp      DNA      linear      PAT 27-FEB-2001
DEFINITION Sequence 32 from Patent WO0108707.
ACCESSION  AX081353
VERSION     AX081353.1 GI:13170195
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.
REFERENCE  1
AUTHORS    Uhlmann, E., Greiner, B., Unger, E., Gothe, G. and Schwerdel, M.
TITLE      Conjugates and methods for the production thereof, and their use
JOURNAL    for transporting molecules via biological membranes
JOURNAL    Patent: WO 0108707-A 32 08-FEB-2001;
JOURNAL    Aventis Pharma Deutschland GmbH (DE)
FEATURES   Location/Qualifiers
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            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="oligonucleotide"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
    |||||
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 94
AX083693/c
LOCUS      18 bp      DNA      linear      PAT 28-FEB-2001
DEFINITION Sequence 7 from Patent WO0110468.
ACCESSION  AX083693
VERSION     AX083693.1 GI:13185421
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.
REFERENCE  1
AUTHORS    Papisov, M.I.
TITLE      Drug-carrier complexes and methods of use thereof
JOURNAL    Patent: WO 0110468-A 7 15-FEB-2001;
JOURNAL    THE GENERAL HOSPITAL CORPORATION (US)
FEATURES   Location/Qualifiers
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            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="Synthetic Oligonucleotide"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
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Db 1 ATGGCGCACGCTGGGAGA 18

RESULT 95
AX088930/c
LOCUS      18 bp      DNA      linear      PAT 17-MAR-2001
DEFINITION Sequence 2 from Patent WO0100232.
ACCESSION  AX088930
VERSION     AX088930.1 GI:13397688
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.
REFERENCE  1
AUTHORS    Garcon, N. and Voss, G.
TITLE      Vaccine
JOURNAL    Patent: WO 0100232-A 2 04-JAN-2001;
JOURNAL    SmithKline Beecham Biologics SA (BE)
FEATURES   Location/Qualifiers
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            /note="CpG containing oligonucleotide"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
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Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 96
AX103809/c
LOCUS      18 bp      DNA      linear      PAT 30-APR-2001
DEFINITION Sequence 1 from Patent WO0122972.
ACCESSION  AX103809
VERSION     AX103809.1 GI:13920006
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.

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REFERENCE
AUTHORS      Krieg,A.M., Schetter,C. and Vollmer,J.C.
TITLE        Immunostimulatory nucleic acids
JOURNAL      Patent: WO 0122972-A 1 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
GmbH (DE)

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/db_xref="taxon:32630"
/note="Synthetic Sequence"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 97
AX103862/c
LOCUS      AX103862      18 bp      DNA      linear      PAT 30-APR-2001
DEFINITION Sequence 54 from Patent WO0122972.
ACCESSION AX103862
VERSION    AX103862.1 GI:13920059
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.

REFERENCE
1
AUTHORS    Krieg,A.M., Schetter,C. and Vollmer,J.C.
TITLE      Immunostimulatory nucleic acids
JOURNAL    Patent: WO 0122972-A 1 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
GmbH (DE)

FEATURES
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 98
AX103863/c
LOCUS      AX103863      18 bp      DNA      linear      PAT 30-APR-2001
DEFINITION Sequence 55 from Patent WO0122972.
ACCESSION AX103863
VERSION    AX103863.1 GI:13920060
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.

REFERENCE
1
AUTHORS    Krieg,A.M., Schetter,C. and Vollmer,J.C.
TITLE      Immunostimulatory nucleic acids
JOURNAL    Patent: WO 0122972-A 55 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
GmbH (DE)

FEATURES
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/organism="synthetic construct"
/mol_type="unassigned DNA"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 99
AX103899/c
LOCUS      AX103899      18 bp      DNA      linear      PAT 30-APR-2001
DEFINITION Sequence 91 from Patent WO0122972.
ACCESSION AX103899
VERSION    AX103899.1 GI:13920096
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.

REFERENCE
1
AUTHORS    Krieg,A.M., Schetter,C. and Vollmer,J.C.
TITLE      Immunostimulatory nucleic acids
JOURNAL    Patent: WO 0122972-A 91 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
GmbH (DE)

FEATURES
source
1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 100
AX105211/c
LOCUS      AX105211      18 bp      DNA      linear      PAT 30-APR-2001
DEFINITION Sequence 110 from Patent WO0122990.
ACCESSION AX105211
VERSION    AX105211.1 GI:13921361
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   artificial sequences.

REFERENCE
1
AUTHORS    Hartmann,G.D., Bratzler,R.L. and Krieg,A.U.
TITLE      Methods related to immunostimulatory nucleic acid-induced
JOURNAL    Patent: WO 0122990-A 110 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; UNIVERSITY OF IOWA RESEARCH
FOUNDATION (US)

FEATURES
source
1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic Oligonucleotide"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1
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RESULT 101
 LOCUS AX135635/c 18 bp DNA linear PAT 29-MAY-2001
 DEFINITION Sequence 6 from Patent WO0132877.
 ACCESSION AX135635
 VERSION AX135635.1 GI:14271905
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM synthetic construct
 artificial sequences.
 REFERENCE 1
 AUTHORS Mackichan,M.L.
 TITLE Cpg receptor (cpg-r) and methods relating thereto
 JOURNAL Patent: WO 0132877-A 6 10-MAY-2001;
 CHIRON CORPORATION (US)
 FEATURES
 source
 1..18
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Cpg oligonucleotide"
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 67;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 102
 LOCUS AX283183/c 18 bp DNA linear PAT 20-NOV-2001
 DEFINITION Sequence 21 from Patent WO0179216.
 ACCESSION AX283183
 VERSION AX283183.1 GI:17044064
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM synthetic construct
 artificial sequences.
 REFERENCE 1
 AUTHORS Uhlmann,E., Breipohl,G. and Will,D.W.
 TITLE Polyamide nucleic acid derivatives, agents and methods for producing them
 JOURNAL Patent: WO 0179216-A 21 25-OCT-2001;
 Aventis Pharma Deutschland GmbH (DE)
 FEATURES
 source
 1..18
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Beschreibung der kuenstlichen Sequenz:Oligonukleotide"
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 67;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 103
 LOCUS AX283250/c 18 bp DNA linear PAT 20-NOV-2001
 DEFINITION Sequence 14 from Patent WO0179249.
 ACCESSION AX283250
 VERSION AX283250.1 GI:17044131
 KEYWORDS

SOURCE synthetic construct
 ORGANISM synthetic construct
 artificial sequences.
 REFERENCE 1
 AUTHORS Uhlmann,E., Breipohl,G. and Will,D.W.
 TITLE Polyamide nucleic acid derivatives, agents and methods for producing the same
 JOURNAL Patent: WO 0179249-A 14 25-OCT-2001;
 Aventis Pharma Deutschland GmbH (DE)
 FEATURES
 source
 1..18
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Beschreibung der kuenstlichen Sequenz: Oligonukleotide"
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 67;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 104
 LOCUS AX355727/c 18 bp DNA linear PAT 06-FEB-2002
 DEFINITION Sequence 755 from Patent WO0197843.
 ACCESSION AX355727
 VERSION AX355727.1 GI:18620395
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM synthetic construct
 artificial sequences.
 REFERENCE 1
 AUTHORS Weiner,G. and Hartmann,G.
 TITLE Methods for enhancing antibody-induced cell lysis and treating cancer
 JOURNAL Patent: WO 0197843-A 755 27-DEC-2001;
 UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
 FEATURES
 source
 1..18
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Synthetic oligonucleotide-phosphorothioate backbone"
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 67;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 105
 LOCUS AX355728/c 18 bp DNA linear PAT 06-FEB-2002
 DEFINITION Sequence 756 from Patent WO0197843.
 ACCESSION AX355728
 VERSION AX355728.1 GI:18620396
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM synthetic construct
 artificial sequences.
 REFERENCE 1
 AUTHORS Weiner,G. and Hartmann,G.
 TITLE Methods for enhancing antibody-induced cell lysis and treating cancer

JOURNAL Patent: WO 0197843-A 756 27-DEC-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
FEATURES
source
1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic oligonucleotide-phosphodiester backbone"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 108
AX45638/c
LOCUS AX45638 18 bp DNA linear PAT 06-JUL-2002
DEFINITION Sequence 115 from Patent WO0222809.
ACCESSION AX45638
VERSION AX45638.1 GI:21714706
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.

REFERENCE 1
AUTHORS Bauer, S., Lipford, G. and Wagner, H.
TITLE Process for high throughput screening of cpg-based
immuno-agonist/antagonist
JOURNAL Patent: WO 0222809-A 115 21-MAR-2002;
Coley Pharmaceutical GmbH (DE)
FEATURES
source
1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic oligonucleotide"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 106
AX45638/c
LOCUS AX45638 18 bp DNA linear PAT 06-JUL-2002
DEFINITION Sequence 115 from Patent WO0222809.
ACCESSION AX45638
VERSION AX45638.1 GI:21714706
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.

REFERENCE 1
AUTHORS Bauer, S., Lipford, G. and Wagner, H.
TITLE Process for high throughput screening of cpg-based
immuno-agonist/antagonist
JOURNAL Patent: WO 0222809-A 115 21-MAR-2002;
Coley Pharmaceutical GmbH (DE)
FEATURES
source
1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic oligonucleotide"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 107
AX468484/c
LOCUS AX468484 18 bp DNA linear PAT 16-JUL-2002
DEFINITION Sequence 4 from Patent WO0226209.
ACCESSION AX468484
VERSION AX468484.1 GI:21901314
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.

REFERENCE 1
AUTHORS O'Hagan, D., Otten, G., Donnelly, J.J., Polo, J.M., Barnett, S.,
Singh, M., Ulmer, J., and Dubensky, T.W.
TITLE Microparticles for delivery of the heterologous nucleic acids
JOURNAL Patent: WO 0226209-A 4 04-APR-2002;
CHIRON CORPORATION (US)
FEATURES
source
1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Artificial sequence is synthesized"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 109
AX513618
LOCUS AX513618 18 bp DNA linear PAT 05-OCT-2002
DEFINITION Sequence 7 from Patent WO0226757.
ACCESSION AX513618
VERSION AX513618.1 GI:23559717
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.

REFERENCE 1
AUTHORS Kandimalla, E.R., Zhao, Q., Yu, D. and Agrawal, S.
TITLE Modulation of immunostimulatory activity of immunostimulatory
oligonucleotide analogs by positional chemical changes
JOURNAL Patent: WO 0226757-A 7 04-APR-2002;
HYBRIDON, INC. (US)
FEATURES
source
1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="synthesis of end-blocked CpG-PS modified
oligodeoxynucleotide phosphorothioate"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

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RESULT 110
AX513688/c
LOCUS      18 bp      DNA      linear      PAT 05-OCT-2002
DEFINITION
Sequence 77 from Patent WO0226757.
ACCESSION  AX513688
VERSION     AX513688.1  GI:23559808
SOURCE      synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
1
AUTHORS     Kandimalla,E.R., Zhao,Q., Yu,D. and Agrawal,S.
TITLE       Modulation of immunostimulatory activity of immunostimulatory
            oligonucleotide analogs by positional chemical changes
JOURNAL     Patent: WO 0226757-A 77 04-APR-2002;
            HYBRIDON, INC. (US)
FEATURES
source
1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="modified linkage of oligodeoxynucleotide
phosphorothioate"
Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  ATGGCGCACGCTGGGAGA 18
Db      18  ATGGCGCACGCTGGGAGA 1

RESULT 111
AX513709/c
LOCUS      18 bp      DNA      linear      PAT 05-OCT-2002
DEFINITION
Sequence 98 from Patent WO0226757.
ACCESSION  AX513709
VERSION     AX513709.1  GI:23559832
SOURCE      synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
1
AUTHORS     Kandimalla,E.R., Zhao,Q., Yu,D. and Agrawal,S.
TITLE       Modulation of immunostimulatory activity of immunostimulatory
            oligonucleotide analogs by positional chemical changes
JOURNAL     Patent: WO 0226757-A 98 04-APR-2002;
            HYBRIDON, INC. (US)
FEATURES
source
1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="modified oligodeoxynucleotide phosphorothioate"
Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  ATGGCGCACGCTGGGAGA 18
Db      18  ATGGCGCACGCTGGGAGA 1

RESULT 112
AX513710/c
LOCUS      18 bp      DNA      linear      PAT 05-OCT-2002
DEFINITION
Sequence 99 from Patent WO0226757.
ACCESSION  AX513710
VERSION     AX513710.1  GI:23559833
SOURCE      synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
1
AUTHORS     Kandimalla,E.R., Zhao,Q., Yu,D. and Agrawal,S.
TITLE       Modulation of immunostimulatory activity of immunostimulatory
            oligonucleotide analogs by positional chemical changes
JOURNAL     Patent: WO 0226757-A 99 04-APR-2002;
            HYBRIDON, INC. (US)
FEATURES
source
1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="modified oligodeoxynucleotide phosphorothioate"
Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  ATGGCGCACGCTGGGAGA 18
Db      18  ATGGCGCACGCTGGGAGA 1

RESULT 113
AX537410/c
LOCUS      18 bp      DNA      linear      PAT 23-NOV-2002
DEFINITION
Sequence 6 from Patent WO02070711.
ACCESSION  AX537410
VERSION     AX537410.1  GI:25269201
KEYWORDS    unidentified
            unidentified
            unclassified.
ORGANISM
1
AUTHORS     Ashman,C., Crowe,J.S., Ellis,J.H. and Lewis,A.P.
TITLE       Vaccine
JOURNAL     Patent: WO 02070711-A 6 12-SEP-2002;
            GLAXO GROUP LIMITED (GB)
FEATURES
source
1..18
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
/note="synthetic immunostimulatory oligonucleotide"
Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  ATGGCGCACGCTGGGAGA 18
Db      18  ATGGCGCACGCTGGGAGA 1

RESULT 114
AX546862/c
LOCUS      18 bp      DNA      linear      PAT 01-MAR-2003
DEFINITION
Sequence 1 from Patent WO02053141.
ACCESSION  AX546862
VERSION     AX546862.1  GI:25912006
KEYWORDS    synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
1
AUTHORS     Bratzler,R.L.

```

```

ORGANISM      synthetic construct
artificial sequences.
REFERENCE
1
AUTHORS       Kandimalla,E.R., Zhao,Q., Yu,D. and Agrawal,S.
TITLE         Modulation of immunostimulatory activity of immunostimulatory
            oligonucleotide analogs by positional chemical changes
JOURNAL       Patent: WO 0226757-A 99 04-APR-2002;
            HYBRIDON, INC. (US)
FEATURES
source
1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="modified oligodeoxynucleotide phosphorothioate"
modified_base 10
/note="g at positions 10 and 14 = 7 deazaguanine"
/mod_base=OTHER
modified_base 14
/note="g at positions 10 and 14 = 7 deazaguanine"
/mod_base=OTHER
Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  ATGGCGCACGCTGGGAGA 18
Db      18  ATGGCGCACGCTGGGAGA 1

RESULT 113
AX537410/c
LOCUS      18 bp      DNA      linear      PAT 23-NOV-2002
DEFINITION
Sequence 6 from Patent WO02070711.
ACCESSION  AX537410
VERSION     AX537410.1  GI:25269201
KEYWORDS    unidentified
            unidentified
            unclassified.
ORGANISM
1
AUTHORS     Ashman,C., Crowe,J.S., Ellis,J.H. and Lewis,A.P.
TITLE       Vaccine
JOURNAL     Patent: WO 02070711-A 6 12-SEP-2002;
            GLAXO GROUP LIMITED (GB)
FEATURES
source
1..18
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
/note="synthetic immunostimulatory oligonucleotide"
Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  ATGGCGCACGCTGGGAGA 18
Db      18  ATGGCGCACGCTGGGAGA 1

RESULT 114
AX546862/c
LOCUS      18 bp      DNA      linear      PAT 01-MAR-2003
DEFINITION
Sequence 1 from Patent WO02053141.
ACCESSION  AX546862
VERSION     AX546862.1  GI:25912006
KEYWORDS    synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
1
AUTHORS     Bratzler,R.L.

```


TITLE Inhibition of angiogenesis by nucleic acids
JOURNAL Patent: WO 02053141-A 11-JUL-2002;
Coley Pharmaceutical Group, Inc. (US)
FEATURES Location/Qualifiers
source

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 115
AX546915/c
LOCUS AX546915 18 bp DNA linear PAT 01-MAR-2003
DEFINITION Sequence 54 from Patent WO2053141.
ACCESSION AX546915
VERSION AX546915.1 GI:25812059
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.

REFERENCE 1
AUTHORS Bratzler, R.L.
TITLE Inhibition of angiogenesis by nucleic acids
JOURNAL Patent: WO 02053141-A 11-JUL-2002;
Coley Pharmaceutical Group, Inc. (US)
FEATURES Location/Qualifiers
source

1.18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic Sequence"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 116
AX546916/c
LOCUS AX546916 18 bp DNA linear PAT 01-MAR-2003
DEFINITION Sequence 55 from Patent WO2053141.
ACCESSION AX546916
VERSION AX546916.1 GI:25812060
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.

REFERENCE 1
AUTHORS Bratzler, R.L.
TITLE Inhibition of angiogenesis by nucleic acids
JOURNAL Patent: WO 02053141-A 11-JUL-2002;
Coley Pharmaceutical Group, Inc. (US)
FEATURES Location/Qualifiers
source

1.18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic Sequence"

Query Match 2.9%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 117
AX546952/c
LOCUS AX546952 18 bp DNA linear PAT 01-MAR-2003
DEFINITION Sequence 91 from Patent WO2053141.
ACCESSION AX546952
VERSION AX546952.1 GI:25812096
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.

REFERENCE 1
AUTHORS Bratzler, R.L.
TITLE Inhibition of angiogenesis by nucleic acids
JOURNAL Patent: WO 02053141-A 11-JUL-2002;
Coley Pharmaceutical Group, Inc. (US)
FEATURES Location/Qualifiers
source

1.18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic Sequence"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 118
AX593887/c
LOCUS AX593887 18 bp DNA linear PAT 13-FEB-2003
DEFINITION Sequence 1 from Patent WO2069369.
ACCESSION AX593887
VERSION AX593887.1 GI:28375146
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.

REFERENCE 1
AUTHORS Schetter, C. and Vollmer, J.
TITLE Cpg-like nucleic acids and methods of use thereof
JOURNAL Patent: WO 02069369-A 1 06-SEP-2002;
Coley Pharmaceutical Group, Ltd (BM)
FEATURES Location/Qualifiers
source

1.18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic oligonucleotide"

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
|||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 119
AX593888/c
LOCUS AX593888 18 bp DNA linear PAT 13-FEB-2003


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JOURNAL      Patent: WO 03039595-A 24 15-MAY-2003;
FEATURES      Inex Pharmaceuticals Corp. (CA)
source        Location/Qualifiers
1..18
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      387 CTTTGGCCACGGTGGTGA 404
Db      1 CTTTGGCCACGGTGGTGA 18

RESULT 124
AX822238
LOCUS      18 bp DNA linear PAT 11-DEC-2003
DEFINITION Sequence 130 from Patent EP1340818.
ACCESSION AX822238
VERSION AX822238.1 GI:39748866
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM
REFERENCE
AUTHORS      Adorjan,P., Burger,M., Maier,S., Nimrich,I., Becker,E., Lesche,R.,
Rujan,T. and Schmitt,A.
TITLE      Method and nucleic acids for the analysis of a colon cell
proliferative disorder
JOURNAL      Patent: EP 1340818-A 130 03-SEP-2003;
Epigenomics AG (DE)
FEATURES      Location/Qualifiers
1..18
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      387 CTTTGGCCACGGTGGTGA 404
Db      1 CTTTGGCCACGGTGGTGA 18

RESULT 125
AX825878
LOCUS      18 bp DNA linear PAT 11-DEC-2003
DEFINITION Sequence 130 from Patent WO03072821.
ACCESSION AX825878
VERSION AX825878.1 GI:39751392
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM
REFERENCE
AUTHORS      Adorjan,P., Burger,M., Maier,S., Nimrich,I., Becker,E., Lesche,R.,
Rujan,T. and Schmitt,A.
TITLE      Method and nucleic acids for the analysis of a colon cell
proliferative disorder
JOURNAL      Patent: WO 03072821-A 130 04-SEP-2003;
Epigenomics AG (DE)
FEATURES      Location/Qualifiers
1..18
/organism="Homo sapiens"
/mol_type="unassigned DNA"

JOURNAL      Patent: WO 03039595-A 24 15-MAY-2003;
FEATURES      Inex Pharmaceuticals Corp. (CA)
source        Location/Qualifiers
1..18
/organism="Homo sapiens"
/mol_type="unassigned DNA"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      387 CTTTGGCCACGGTGGTGA 404
Db      1 CTTTGGCCACGGTGGTGA 18

RESULT 126
BD009103/c
LOCUS      18 bp DNA linear PAT 31-JAN-2002
DEFINITION Immunostimulatory nucleic acid molecules.
ACCESSION BD009103
VERSION BD009103.1 GI:18637476
KEYWORDS JP 2001503267-A/55.
SOURCE      synthetic construct
ORGANISM      artificial sequences.
REFERENCE      1 (bases 1 to 18)
AUTHORS      Krieg,A.M. and Kline,J.N.
TITLE      Immunostimulatory nucleic acid molecules
JOURNAL      Patent: JP 2001503267-A 55 13-MAR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION
COMMENT      OS Artificial Sequence
PN JP 2001503267-A/55
PD 13-MAR-2001
PF 30-OCT-1997 JP 1998520784
PR 30-OCT-1996 US 08/739652
PI ARTHUR M KRIEG, JOEL N KLINE
PC C07H21/00,C07H21/02,C07H21/04,A61K31/175,A61K31/335,A61K31/47,
A61K31/70
CC
FH Key Location/Qualifiers
FT source
1..18
Location/Qualifiers
1..18
/organism="Artificial Sequence"
/mol_type="synthetic construct"
/db_xref="taxon:32630"

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 127
BD069938/c
LOCUS      18 bp DNA linear PAT 27-AUG-2002
DEFINITION Use of nucleic acids containing unethylated CPG dinucleotide in
the treatment of LPS-associated disorders.
ACCESSION BD069938
VERSION BD069938.1 GI:22615541
KEYWORDS JP 2001513776-A/27.
SOURCE      synthetic construct
ORGANISM      artificial sequences.
REFERENCE      1 (bases 1 to 18)
AUTHORS      Schwartz,D.A. and Krieg,A.M.
TITLE      Use of nucleic acids containing unethylated CPG dinucleotide in
the treatment of LPS-associated disorders
JOURNAL      Patent: JP 2001513776-A 27 04-SEP-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION
COMMENT      OS Artificial Sequence
PN JP 2001513776-A/27
PD 04-SEP-2001

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PF 25-FEB-1998 JP 1998537810
PR 28-FEB-1997 US 60/039405
PI DAVID A SCHWARTZ, ARTHUR M KRIEG
PC A61K49/00, C07H21/02, C07H21/04, A01N43/04
CC Synthetic oligonucleotide
FH Key Location/Qualifiers
FT source 1..18
FT Location/Qualifiers
FT Location/Qualifiers
FT 1..18
FT /organism="Artificial Sequence".
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source
1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 128
LOCUS BD076451/c 18 bp DNA linear PAT 27-AUG-2002
DEFINITION Combined antisense library.
ACCESSION BD076451
VERSION BD076451.1 GI:22622054
KEYWORDS JP 2001519170-A/45.
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Riley, T.A., Brown, B.D. and Arnold, L.J.
TITLE Combined antisense library
JOURNAL Patent: JP 2001519170-A 45 23-OCT-2001;
COMMENT OASIS BIOSCIENCES INC
OS Artificial Sequence
PN JP 2001519170-A/45
PF 23-OCT-2001
PR 28-SEP-1998 JP 2000515030
PR 02-OCT-1997 US 60/060673, 18-AUG-1998 US 09/136080 PI
TIMOTHY A RILEY, BOB D BROWN, LYLE J ARNOLD
PC C12Q1/68, C07H21/04, C12N15/09, C12P19/34, C12N15/00 CC
Synthetic oligonucleotide
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FT source 1..18
FT Location/Qualifiers
FT Location/Qualifiers
FT 1..18
FT /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 129
LOCUS BD080525 18 bp RNA linear PAT 27-AUG-2002
DEFINITION Ribonucleoside-derivative and method for preparing the same.
ACCESSION BD080525
VERSION BD080525.1 GI:22626128
KEYWORDS JP 2001515087-A/4.
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Pitsch, S., Weiss, P.A. and Jenny, L.
TITLE Ribonucleoside-derivative and method for preparing the same
JOURNAL Patent: JP 2001515087-A 4 18-SEP-2001;
COMMENT STEFAN PITTSCH, PATRICK A WEISS, LUZI JENNY
OS Artificial Sequence
PN JP 2001515087-A/4
PF 18-SEP-2001
PF 17-AUG-1998 JP 2000509723
PR 18-AUG-1997 CH 1931/97
PI STEFAN PITTSCH, PATRICK A WEISS, LUZI JENNY
PC C07H19/06, C07F7/18, C07H19/16, C07H21/02, C07H23/00 CC
Description of Artificial Sequence: synthetic polynucleotide FH
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FT Location/Qualifiers
FT Location/Qualifiers
FT 1..18
FT /organism="Artificial Sequence".
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source
1..18
/organism="synthetic construct"
/mol_type="genomic RNA"
/db_xref="taxon:32630"
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 130
LOCUS BD106497/c 18 bp DNA linear PAT 18-SEP-2002
DEFINITION High efficiency encapsulation of charged therapeutic agents in lipid vesicles.
ACCESSION BD106497
VERSION BD106497.1 GI:23201315
KEYWORDS JP 2002501511-A/14.
SOURCE Chlamydia sp.
ORGANISM Chlamydia sp.
REFERENCE 1 (bases 1 to 18)
AUTHORS Sample, S.C., Klimuk, S.K., Harasym, T., Hope, M.J., Ansel, S.M., Cullis, P., Scherrer, P. and Debeyer, D.S.
TITLE High efficiency encapsulation of charged therapeutic agents in lipid vesicles
JOURNAL Patent: JP 2002501511-A 14 15-JAN-2002;
COMMENT INEX PHARMACEUTICALS CORP
PN JP 2002501511-A/14
PF 15-JAN-2002
PF 14-MAY-1998 JP 1998548646
PI SEAN C SAMPLE, SANDRA K KLIMUK, TROY HARASYM, MICHAEL J HOPE, PI STEVEN M ANSEL,
PI PIETER CULLIS, PETER SCHERRER, DAN SUITE DEBEYER PC A61K9/00
CC Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers
FT source 1..18
FT Location/Qualifiers
FT Location/Qualifiers
FT 1..18
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/mol_type="genomic DNA"
/db_xref="taxon:35827"
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1

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RESULT 131
BD187532/c
LOCUS
DEFINITION REGULATION OF bcl-2 GENE EXPRESSION.
ACCESSION BD187532
VERSION BD187532.1 GI:32997271
KEYWORDS JP 2003026609-A/17
SOURCE synthetic construct
ORGANISM artificial construct
REFERENCE 1 (bases 1 to 18)
AUTHORS Reed,J.C.
TITLE REGULATION OF bcl-2 GENE EXPRESSION
JOURNAL Patent: JP 2003026609-A 17 29-JAN-2003;
          John C REED
COMMENT OS Artificial Sequence
        PN JP 2003026609-A/17
        PD 29-JAN-2003
        PF 19-JUN-2002 JP 2002178753
        PR 20-SEP-1993 US 08/124256
        PI John C reed
        CC Description of Artificial Sequence: Designed DNA based on bcl-
        CC 2 gene
FH Key Location/Qualifiers.
FEATURES
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        1..18
        /organism="synthetic construct"
        /mol_type="genomic DNA"
        /db_xref="taxon:32630"
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 132
BD190420/c
LOCUS
DEFINITION Microemulsions with Adsorbed Macromolecules and Microparticles.
ACCESSION BD190420
VERSION BD190420.1 GI:33000159
KEYWORDS JP 2002537102-A/4.
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1 (bases 1 to 18)
AUTHORS Barackman,J., Simph,M., Ugozoli,M., Kazazu,J., Donnelly,J.,
          Ott,G.S. and Ohagan,D.
TITLE Microemulsions with Adsorbed Macromolecules and Microparticles
JOURNAL Patent: JP 2002537102-A 4 05-NOV-2002;
          Chiron Corporation
COMMENT OS Artificial Sequence
        PN JP 2002537102-A/4
        PD 05-NOV-2002
        PF 09-FEB-2000 JP 2000600618
        PR 29-JUL-1999 US 60/146391,28-OCT-1999 US 60/161997, PR
        PR 26-FEB-1999 US 60/121858
        PI John Barackman,nannohan simph,mildred ugozoli,jina kazazu,john
        PI donnelly,
        PI gary s ott,derek chagan
        CC Oligonucleotide
        FH Key Location/Qualifiers.
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    source
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        /db_xref="taxon:32630"

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Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 133
BD192469/c
LOCUS
DEFINITION Compositions and methods for the delivery of oligonucleotides via
          the alimentary canal.
ACCESSION BD192469
VERSION BD192469.1 GI:33002208
KEYWORDS JP 2002510319-A/34.
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Teng,C.L. and Hardee,G.
TITLE Compositions and methods for the delivery of oligonucleotides via
          the alimentary canal.
JOURNAL Patent: JP 2002510319-A 34 02-APR-2002;
          ISIS PHARMACEUTICALS INC
COMMENT OS Artificial Sequence
        PN JP 2002510319-A/34
        PD 02-APR-2002
        PR 01-JUL-1998 JP 1999507295
        PR 01-JUL-1997 US 08/886829
        PI CHING LEOU TENG,GREG HARDEE
        PC C12Q1/68,A61K9/127,A61K48/00,C07H21/04
        CC Description of Artificial Sequence: Novel Sequence FH Key
          Location/Qualifiers.
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        /db_xref="taxon:32630"
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 134
BD205569/c
LOCUS
DEFINITION Method of controlling hematopoiesis by using CpG oligonucleotide.
ACCESSION BD205569
VERSION BD205569.1 GI:33015339
KEYWORDS JP 2002514397-A/59.
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Wagner,H. and Lipford,G.
TITLE Method of controlling hematopoiesis by using CpG oligonucleotide
JOURNAL Patent: JP 2002514397-A 59 21-MAY-2002;
          CORY PHARMACEUTICALS GMBH,CORY PHARMACEUTICALS GROUP INC
COMMENT OS Artificial Sequence
        PN JP 2002514397-A/59
        PD 21-MAY-2002
        PR 14-MAY-1999 JP 2000547969
        PR 14-MAY-1998 US 60/085516,02-FEB-1999 US 09/241653 PI
        PI HERMANN WAGNER,GRAYSON LIPFORD
        PC C12N15/09,A61K31/70,A61K39/39,C07H21/04//A61K45/00,C12N15/00

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CC Synthetic Sequence
FH Key Location/Qualifiers
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FT /organism='Artificial Sequence'
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FT /organism='synthetic construct'
FT /mol_type='genomic DNA'
FT /db_xref='taxon:32630'

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 135
BD205614/c
LOCUS AX083694/c 18 bp DNA linear PAT 17-JUL-2003
DEFINITION Method of controlling hematopoiesis by using CpG oligonucleotide.
ACCESSION BD205614
VERSION JP 2002514397-A 104 21-MAY-2002;
KEYWORDS CORY PHARMACEUTICALS GMBH, CORY PHARMACEUTICALS GROUP INC
SOURCE OS Artificial Sequence
ORGANISM PN JP 2002514397-A/104
PD 21-MAY-2002
PF 14-MAY-1999 JP 2000547969
PR 14-MAY-1998 US 60/085516, 02-FEB-1999 US 09/241653 PI
PC C12N15/09, A61K31/70, A61K39/39, C07H21/04, A61K45/00, C12N15/00
FH HERMANN WAGNER, GRAYSON LIPFORD
FT Key Location/Qualifiers
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FT /organism='Artificial Sequence'
FT Location/Qualifiers
FT 1..18
FT /organism='synthetic construct'
FT /mol_type='genomic DNA'
FT /db_xref='taxon:32630'

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 136
BD222609/c
LOCUS BD222609 18 bp DNA linear PAT 17-JUL-2003
DEFINITION Compositions of cpg and saponin adjuvants and uses thereof.
ACCESSION BD222609
VERSION BD222609.1 GI:33032379
KEYWORDS JP 2002522510-A/1.
SOURCE Quillaja saponaria
ORGANISM Quillaja saponaria
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Magnoliopsida; core eudicots;
rosids; eurosids I; Fabales; Quillajaaceae; Quillaja.
REFERENCE 1 (bases 1 to 18)

AUTHORS Kensil, C.A.
TITLE Compositions of CPG and saponin adjuvants and uses thereof
JOURNAL Patent: JP 2002522510-A 1 23-JUL-2002;
COMMENT AQUILA BIOPHARMACEUTICALS INC
OS Quillaja saponaria
PN JP 2002522510-A/1
PD 23-JUL-2002
PF 06-AUG-1999 JP 2000564661
PR 10-AUG-1998 US 60/095913, 08-APR-1999 US 60/128608 PI
PC A61K39/39, A61K39/00, C12N15/09, C12N15/00
CC Compositions of CPG and saponin adjuvants and uses thereof FH
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FT /mol_type='genomic DNA'
FT /db_xref='taxon:32244'

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 137
AX083694/c
LOCUS AX083694 19 bp DNA linear PAT 28-FEB-2001
DEFINITION Sequence 8 from Patent WO0110468.
ACCESSION AX083694
VERSION AX083694.1 GI:13185422
KEYWORDS synthetic construct
ORGANISM synthetic construct
REFERENCE 1 Papisov, M.I.
AUTHORS Drug-carrier complexes and methods of use thereof
TITLE Patent: WO 0110468-A 8 15-FEB-2001;
JOURNAL THE GENERAL HOSPITAL CORPORATION (US)
FT Location/Qualifiers
FT source 1..19
FT /organism='synthetic construct'
FT /mol_type='unassigned DNA'
FT /db_xref='taxon:32630'
FT /note='Synthetic Oligonucleotide-c indicates an RNA base'

Query Match
Best Local Similarity 2.9%; Score 18; DB 1; Length 19;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 138
AX083695
LOCUS AX083695 19 bp DNA linear PAT 28-FEB-2001
DEFINITION Sequence 9 from Patent WO0110468.
ACCESSION AX083695
VERSION AX083695.1 GI:13185423
KEYWORDS synthetic construct
ORGANISM synthetic construct
REFERENCE 1 Papisov, M.I.
AUTHORS

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TITLE Drug-carrier complexes and methods of use thereof
JOURNAL Patent: WO 0110468-A 9 15-FEB-2001;
THE GENERAL HOSPITAL CORPORATION (US)
FEATURES Location/Qualifiers
source
1. .19
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic Oligonucleotide-c indicates an RNA base"

Query Match 2.9%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 1 ATGGCGCAGCTGGGAGA 18

RESULT 139
AX453854
LOCUS AX453854 19 bp RNA linear PAT 06-JUL-2002
DEFINITION Sequence 13 from Patent EP121351.
ACCESSION AX453854
VERSION AX453854.1 GI:21713523
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.

REFERENCE 1
AUTHORS Taira,K., Warashina,M. and Warashina,T.
TITLE Nucleic acid enzymes acquiring an activity for cleaving a target
rna by recognising another molecule
JOURNAL Patent: EP 121351-A 13 12-JUN-2002;
National Institute of Advanced Industrial Science and Technology
(JP)

FEATURES Location/Qualifiers
source
1. .19
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="part of bcl-2 mRNA as a substrate"

Query Match 2.9%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 190 GACCCGGTCGCCAGGACC 207
Db 2 GACCCGGTCGCCAGGACC 19

RESULT 140
AR182888/c
LOCUS AR182888 20 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 60 from patent US 6339068.
ACCESSION AR182888
VERSION AR182888.1 GI:202226095
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 20)
AUTHORS Krieg,A.M., Davis,H.L., Wu,T. and Schorr,J.
TITLE Vectors and methods for immunization or therapeutic protocols
JOURNAL Patent: US 6339068-A 60 15-JAN-2002;
Patent: US 6339068-A 60 15-JAN-2002;

FEATURES Location/Qualifiers
source
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/organism="unknown"
/mol_type="unassigned DNA"

Query Match 2.9%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 78;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 141
AX103895/c
LOCUS AX103895 20 bp DNA linear PAT 30-APR-2001
DEFINITION Sequence 87 from Patent WO0122972.
ACCESSION AX103895
VERSION AX103895.1 GI:13920092
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.

REFERENCE 1
AUTHORS Krieg,A.M., Schetter,C. and Vollmer,J.C.
TITLE Immunostimulatory nucleic acids
JOURNAL Patent: WO 0122972-A 87 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US); Coley Pharmaceutical
GmbH (DE)

FEATURES Location/Qualifiers
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

Query Match 2.9%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 142
AX355729/c
LOCUS AX355729 20 bp DNA linear PAT 06-FEB-2002
DEFINITION Sequence 757 from Patent WO0197843.
ACCESSION AX355729
VERSION AX355729.1 GI:18620397
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.

REFERENCE 1
AUTHORS Weiner,G. and Hartmann,G.
TITLE Methods for enhancing antibody-induced cell lysis and treating
cancer
JOURNAL Patent: WO 0197843-A 757 27-DEC-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)

FEATURES Location/Qualifiers
source
1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic oligonucleotide-chimeric
phosphorothioate/phosphodiester backbone with
phosphorothioate at 5' and 3' ends"

Query Match 2.9%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 143

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AX546948/c
LOCUS AX546948 20 bp DNA linear PAT 01-MAR-2003
DEFINITION Sequence 87 from Patent WO2003141.
ACCESSION AX546948
VERSION AX546948.1 GI:25812092
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Bratzler, R.L.
TITLE Inhibition of angiogenesis by nucleic acids
JOURNAL Patent: WO 02053141-A 87 11-JUL-2002;
Coley Pharmaceutical Group, Inc. (US)
FEATURES
Source 1..20
/mol_type="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic Sequence"
Query Match 2.9%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
RESULT 144
LOCUS AR007296 17 bp DNA linear PAT 04-DEC-1998
DEFINITION Sequence 10 from patent US 5750390.
ACCESSION AR007296
VERSION AR007296.1 GI:3966780
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Thompson, J.D. and Draper, K.G.
TITLE Method and reagent for treatment of diseases caused by expression
of the bcl-2 gene
JOURNAL Patent: US 5750390-A 10 12-MAY-1998;
FEATURES
Source 1..17
/mol_type="unassigned DNA"
Query Match 2.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 284 TGGCCCTCGGCAAGCC 300
Db 1 TGGCCCTCGGCAAGCC 17
RESULT 145
LOCUS I96089/c 17 bp DNA linear PAT 01-DEC-1998
DEFINITION Sequence 8 from patent US 5734033.
ACCESSION I96089
VERSION I96089.1 GI:3940559
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Reed, J.
TITLE Antisense oligonucleotides inhibiting human bcl-2 gene expression
JOURNAL Patent: US 5734033-A 8 31-MAR-1998;

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FEATURES
Source 1..17
/mol_type="unassigned DNA"
Query Match 2.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4 GCGCACGCTGGGAGAC 20
Db 17 GCGCACGCTGGGAGAC 1
RESULT 146
LOCUS I96090/c 17 bp DNA linear PAT 01-DEC-1998
DEFINITION Sequence 9 from patent US 5734033.
ACCESSION I96090
VERSION I96090.1 GI:3940560
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Reed, J.
TITLE Antisense oligonucleotides inhibiting human bcl-2 gene expression
JOURNAL Patent: US 5734033-A 9 31-MAR-1998;
FEATURES
Source 1..17
/mol_type="unassigned DNA"
Query Match 2.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAG 17
Db 17 ATGGCGCACGCTGGGAG 1
RESULT 147
LOCUS AR146360/c 18 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 72 from patent US 6218371.
ACCESSION AR146360
VERSION AR146360.1 GI:15109549
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Krieg, A.M. and Weiner, G.
TITLE Methods and products for stimulating the immune system using
immunotherapeutic oligonucleotides and cytotoxins
JOURNAL Patent: US 6218371-A 72 17-APR-2001;
FEATURES
Source 1..18
/mol_type="unassigned DNA"
Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 96;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
RESULT 148
LOCUS AR154743/c 18 bp DNA linear PAT 01-DEC-1998
DEFINITION Sequence 8 from patent US 5734033.
ACCESSION AR154743
VERSION AR154743.1 GI:3940559
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Reed, J.
TITLE Antisense oligonucleotides inhibiting human bcl-2 gene expression
JOURNAL Patent: US 5734033-A 8 31-MAR-1998;

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LOCUS AR154743 18 bp DNA linear PAT 08-AUG-2001

DEFINITION Sequence 72 from patent US 6239116.

ACCESSION AR154743

VERSION AR154743.1 GI:15122796

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

REFERENCE 1 (bases 1 to 18)

AUTHORS Krieg,A.M. and Kline,J.N.

TITLE Immunostimulatory nucleic acid molecules

JOURNAL Patent: US 6239116-A 72 29-MAY-2001;

FEATURES

source

1..18

/organism="unknown"

/mol_type="unassigned DNA"

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 96;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18

Db 18 ATGGCGCGCGCTGGGAGA 1

RESULT 149

BD261124/c

LOCUS BD261124 18 bp DNA linear PAT 17-JUL-2003

DEFINITION Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines.

ACCESSION BD261124

VERSION BD261124.1 GI:33070894

KEYWORDS JP 2002510644-A/72.

SOURCE synthetic construct

ORGANISM artificial sequences.

REFERENCE 1 (bases 1 to 18)

AUTHORS Krieg,A.M. and Weiner,G.

TITLE Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines

JOURNAL Patent: JP 2002510644-A 72 09-APR-2002;

UNIVERSITY OF IOWA RESEARCH FOUNDATION

COMMENT OS Artificial Sequence

PN JP 2002510644-A/72

PD 09-APR-2002

PF 02-APR-1999 JP 2000542030

PR 03-APR-1998 US 60/080729

PI ARTHUR M KRIEG,GEORGE WEINER

PC A61K38/00,A61K31/7088,A61K39/00,A61P15/00,A61P35/00,A61P37/04,

CC A61K37/02

CC Synthetic Sequence

CC Location/Qualifiers

FT source

FT 1..18

FT /organism='Artificial Sequence'

FEATURES

source

1..18

/organism="synthetic construct"

/mol_type="genomic DNA"

/db_xref="taxon:32630"

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 96;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18

Db 18 ATGGCGCGCGCTGGGAGA 1

RESULT 150

BD267888/c

LOCUS BD267888 18 bp DNA linear PAT 17-JUL-2003

DEFINITION Methods for the prevention and treatment of parasitic infections and related diseases using CPG oligonucleotides.

ACCESSION BD267888

VERSION BD267888.1 GI:33077656

KEYWORDS JP 2002513763-A/61.

SOURCE synthetic construct

ORGANISM artificial sequences.

REFERENCE 1 (bases 1 to 18)

AUTHORS Graminski,R.A., Krieg,A.M., Davis,H.L. and Hoffman,S.L.

TITLE Methods for the prevention and treatment of parasitic infections and related diseases using CPG oligonucleotides

JOURNAL Patent: JP 2002513763-A 61 14-MAY-2002;

UNIVERSITY OF IOWA RESEARCH FOUNDATION, OTTAWA CIVIC LOEB RESEARCH INSTITUTE, UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE NAVY

COMMENT OS Artificial Sequence

PN JP 2002513763-A/61

PD 14-MAY-2002

PF 06-MAY-1999 JP 2000546780

PR 06-MAY-1998 US 60/084512

PI ROBERT A GRAMZINSKI,ARTHUR M KRIEG,HEATHER L DAVIS,STEPHEN L HOFFMAN

PC A61K31/711,A61K9/127,A61K38/00,A61K38/22,A61K45/00,A61P31/00,

CC A61P33/00//

CC C12N15/09,A61K37/02,A61K37/24,C12N15/00

CC Synthetic Sequence

CC Location/Qualifiers

FT key

FT 1..18

FT /organism='Artificial Sequence'

FT Location/Qualifiers

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/organism="synthetic construct"

/mol_type="genomic DNA"

/db_xref="taxon:32630"

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 96;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18

Db 18 ATGGCGCGCGCTGGGAGA 1

RESULT 151

AR222232/c

LOCUS AR222232 18 bp DNA linear PAT 26-SEP-2002

DEFINITION Sequence 66 from patent US 6429199.

ACCESSION AR222232

VERSION AR222232.1 GI:23329697

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

REFERENCE 1 (bases 1 to 18)

AUTHORS Krieg,A.M. and Hartmann,G.

TITLE Immunostimulatory nucleic acid molecules for activating dendritic cells

JOURNAL Patent: US 6429199-A 66 06-AUG-2002;

FEATURES

source

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/mol_type="genomic DNA"

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 96;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18

Db 18 ATGGCGCGCGCTGGGAGA 1

RESULT 152
 AR432493/c
 LOCUS 18 bp DNA linear PAT 18-DEC-2003
 DEFINITION Sequence 72 from patent US 6653292.
 ACCESSION AR432493
 VERSION AR432493.1 GI:40194828
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 18)
 AUTHORS Krieg,A.M. and Weiher,G.
 TITLE Method of treating cancer using immunostimulatory oligonucleotides
 JOURNAL Patent: US 6653292-A 72 25-NOV-2003;
 FEATURES Location/Qualifiers
 1..18
 /organism="unknown"
 /mol_type="genomic DNA"
 Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCGCTGGGAGA 1
 RESULT 153
 AX103886/c
 LOCUS 18 bp DNA linear PAT 30-APR-2001
 DEFINITION Sequence 78 from Patent WO0122972.
 ACCESSION AX103886
 VERSION AX103886.1 GI:13920083
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 REFERENCE 1
 AUTHORS Krieg,A.M., Schetter,C. and Vollmer,J.C.
 TITLE Immunostimulatory nucleic acids
 JOURNAL Patent: WO 0122972-A 78 05-APR-2001;
 UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
 GmbH (DE)
 FEATURES Location/Qualifiers
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 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCTCGCTGGGAGA 1
 RESULT 154
 AX103887/c
 LOCUS 18 bp DNA linear PAT 30-APR-2001
 DEFINITION Sequence 79 from Patent WO0122972.
 ACCESSION AX103887
 VERSION AX103887.1 GI:13920084
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 REFERENCE 1
 AUTHORS Krieg,A.M., Schetter,C. and Vollmer,J.C.
 TITLE Immunostimulatory nucleic acids

JOURNAL Patent: WO 0122972-A 79 05-APR-2001;
 UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
 GmbH (DE)
 FEATURES Location/Qualifiers
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 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCGCTGGGAGA 1
 RESULT 155
 AX104214/c
 LOCUS 18 bp DNA linear PAT 30-APR-2001
 DEFINITION Sequence 406 from Patent WO0122972.
 ACCESSION AX104214
 VERSION AX104214.1 GI:13920411
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 REFERENCE 1
 AUTHORS Krieg,A.M., Schetter,C. and Vollmer,J.C.
 TITLE Immunostimulatory nucleic acids
 JOURNAL Patent: WO 0122972-A 406 05-APR-2001;
 UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
 GmbH (DE)
 FEATURES Location/Qualifiers
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 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGTACGCTGGGAGA 1
 RESULT 156
 AX355722/c
 LOCUS 18 bp DNA linear PAT 06-FEB-2002
 DEFINITION Sequence 750 from Patent WO0197843.
 ACCESSION AX355722
 VERSION AX355722.1 GI:18620390
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 REFERENCE 1
 AUTHORS Weiner,G. and Hartmann,G.
 TITLE Methods for enhancing antibody-induced cell lysis and treating
 cancer
 JOURNAL Patent: WO 0197843-A 750 27-DEC-2001;
 UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
 FEATURES Location/Qualifiers
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 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Synthetic oligonucleotide-phosphorothioate
 backbone".

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 157
 AX355723/c
 LOCUS 18 bp DNA linear PAT 06-FEB-2002
 DEFINITION Sequence 751 from Patent WO0197843.
 ACCESSION AX355723
 VERSION AX355723.1 GI:18620391
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM artificial sequences.
 REFERENCE 1
 AUTHORS Weiner, G. and Hartmann, G.
 TITLE Methods for enhancing antibody-induced cell lysis and treating cancer
 JOURNAL UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
 PATENT: WO 0197843-A 751 27-DEC-2001;
 LOCATION/Qualifiers
 1..18
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Synthetic oligonucleotide-phosphorothioate backbone"

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCGCTGGGAGA 1

RESULT 158
 AX355725/c
 LOCUS 18 bp DNA linear PAT 06-FEB-2002
 DEFINITION Sequence 753 from Patent WO0197843.
 ACCESSION AX355725
 VERSION AX355725.1 GI:18620393
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM artificial sequences.
 REFERENCE 1
 AUTHORS Weiner, G. and Hartmann, G.
 TITLE Methods for enhancing antibody-induced cell lysis and treating cancer
 JOURNAL UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
 PATENT: WO 0197843-A 753 27-DEC-2001;
 LOCATION/Qualifiers
 1..18
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Synthetic oligonucleotide-phosphorothioate backbone"

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGTACCTGGGAGA 1

RESULT 159
 AX455636/c
 LOCUS 18 bp DNA linear PAT 06-JUL-2002
 DEFINITION Sequence 113 from Patent WO0222809.
 ACCESSION AX455636
 VERSION AX455636.1 GI:21714704
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM artificial sequences.
 REFERENCE 1
 AUTHORS Bauer, S., Lipford, G. and Wagner, H.
 TITLE Process for high throughput screening of cp9-based immuno-agonist/antagonist
 JOURNAL Patent: WO 0222809-A 113 21-MAR-2002;
 Coley Pharmaceutical GmbH (DE)
 FEATURES Location/Qualifiers
 source
 1..18
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Synthetic oligonucleotide"

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCGCTGGGAGA 1

RESULT 160
 AX546939/c
 LOCUS 18 bp DNA linear PAT 01-MAR-2003
 DEFINITION Sequence 78 from Patent WO02053141.
 ACCESSION AX546939
 VERSION AX546939.1 GI:25812083
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM artificial sequences.
 REFERENCE 1
 AUTHORS Bratzler, R.L.
 TITLE Inhibition of angiogenesis by nucleic acids
 JOURNAL Patent: WO 02053141-A 78 11-JUL-2002;
 Coley Pharmaceutical Group, Inc. (US)
 FEATURES Location/Qualifiers
 source
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 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Synthetic Sequence"

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 161
 AX546940/c
 LOCUS 18 bp DNA linear PAT 01-MAR-2003
 DEFINITION Sequence 79 from Patent WO02053141.
 ACCESSION AX546940
 VERSION AX546940.1 GI:25812084
 KEYWORDS synthetic construct
 SOURCE synthetic construct

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ORGANISM      synthetic construct
               artificial sequences.
REFERENCE      1
AUTHORS        Bratzler, R.L.
TITLE          Inhibition of angiogenesis by nucleic acids
JOURNAL        Patent: WO 02053141-A 79 11-JUL-2002;
               Coley Pharmaceutical Group, Inc. (US)
FEATURES
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      /mol_type="unassigned DNA"
      /db_xref="taxon:32630"
      /note="Synthetic Sequence"
  Query Match      2.7%; Score 16.4; DB 1; Length 18;
  Best Local Similarity 94.4%; Pred. No. 96;
  Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCAGCTGGGAGA 18
Db      18 ATGGCGCGCGCTGGGAGA 1

RESULT 162
LOCUS      AX547267/c
DEFINITION Sequence 406 from Patent WO02053141.
ACCESSION  AX547267
VERSION     AX547267.1 GI:25812411
KEYWORDS    synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
REFERENCE    1
AUTHORS      Bratzler, R.L.
TITLE        Inhibition of angiogenesis by nucleic acids
JOURNAL      Patent: WO 02053141-A 406 11-JUL-2002;
            Coley Pharmaceutical Group, Inc. (US)
FEATURES
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      /mol_type="unassigned DNA"
      /db_xref="taxon:32630"
      /note="Synthetic Sequence"
  Query Match      2.7%; Score 16.4; DB 1; Length 18;
  Best Local Similarity 94.4%; Pred. No. 96;
  Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCAGCTGGGAGA 18
Db      18 ATGGCGCTACGAGTGGGAT 18

RESULT 163
LOCUS      AX599331
DEFINITION Sequence 671 from Patent WO02077272.
ACCESSION  AX599331
VERSION     AX599331.1 GI:28399475
KEYWORDS    synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
REFERENCE    1
AUTHORS      Berlin, K., Braun, A., Distler, J., Guetig, D., Howe, A., Mueller, J.,
            Olek, A., Piepenbrock, C., Adorjan, P., Grabs, G., Lesche, R., Leu, E.,
            Lewin, A., Lipscher, E., Maier, S., Model, F., Mueller, V., Otto, T.,
            Pelet, C., and Ziebarth, H.
            Methods and nucleic acids for the analysis of hematopoietic cell
            proliferative disorders
            Patent: WO 02077272-A 671 03-OCT-2002;
            Epigenomics AG (DE)
FEATURES
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      /organism="synthetic construct"
      /mol_type="unassigned DNA"
      /db_xref="taxon:32630"
      /note="Detection oligonucleotide for BCL2"
  Query Match      2.7%; Score 16.4; DB 1; Length 18;
  Best Local Similarity 94.4%; Pred. No. 96;
  Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCTACGAGTGGGAT 18
Db      18 ATGGCGCTACGAGTGGGAT 18

RESULT 164
LOCUS      AX767741
DEFINITION Sequence 389 from Patent WO03044226.
ACCESSION  AX767741
VERSION     AX767741.1 GI:32436346
KEYWORDS    synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
REFERENCE    1
AUTHORS      Burger, M., Caldwell, C., Genc, B., Becker, E., Maier, S. and
            Nimmrich, I.
            Method and nucleic acids for the analysis of a lymphoid cell
            proliferative disorder
            Patent: WO 03044226-A 389 30-MAY-2003;
            Epigenomics AG (DE)
FEATURES
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      /organism="synthetic construct"
      /mol_type="unassigned DNA"
      /db_xref="taxon:32630"
      /note="Detection oligonucleotide for BCL2"
  Query Match      2.7%; Score 16.4; DB 1; Length 18;
  Best Local Similarity 94.4%; Pred. No. 96;
  Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      76 AGGGGCTACGAGTGGGAT 93
Db      1 AGGGGTTACGAGTGGGAT 18

RESULT 165
LOCUS      AX796189
DEFINITION Sequence 532 from Patent WO03052135.
ACCESSION  AX796189
VERSION     AX796189.1 GI:37516855
KEYWORDS    synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
REFERENCE    1
AUTHORS      Burger, M., Field, J.K., Genc, B., Liloglou, T., Lipscher, E., Maier, S.
            and Nimmrich, I.
            Method and nucleic acids for the analysis of a lung cell
            proliferative disorder
            Patent: WO 03052135-A 532 26-JUN-2003;
            Epigenomics AG (DE)
FEATURES
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      /db_xref="taxon:32630"
      /note="Detection oligonucleotide for BCL2"
  Query Match      2.7%; Score 16.4; DB 1; Length 18;
  Best Local Similarity 94.4%; Pred. No. 96;
  Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      76 AGGGGCTACGAGTGGGAT 93
Db      1 AGGGGTTACGAGTGGGAT 18

RESULT 166
LOCUS      AX796189
DEFINITION Sequence 532 from Patent WO03052135.
ACCESSION  AX796189
VERSION     AX796189.1 GI:37516855
KEYWORDS    synthetic construct
            synthetic construct
            artificial sequences.
ORGANISM
REFERENCE    1
AUTHORS      Burger, M., Field, J.K., Genc, B., Liloglou, T., Lipscher, E., Maier, S.
            and Nimmrich, I.
            Method and nucleic acids for the analysis of a lung cell
            proliferative disorder
            Patent: WO 03052135-A 532 26-JUN-2003;
            Epigenomics AG (DE)
FEATURES
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      /organism="synthetic construct"
      /mol_type="unassigned DNA"
      /db_xref="taxon:32630"
      /note="Detection oligonucleotide for BCL2"
  Query Match      2.7%; Score 16.4; DB 1; Length 18;
  Best Local Similarity 94.4%; Pred. No. 96;
  Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      76 AGGGGCTACGAGTGGGAT 93
Db      1 AGGGGTTACGAGTGGGAT 18

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Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 96;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 AGGGCTACGAGTGGGAT 93
| | | | | | | | | | | | | | | |
Db 1 AGGGCTACGAGTGGGAT 18

RESULT 166
BD009126/c
LOCUS BD009126 18 bp DNA linear PAT 31-JAN-2002
DEFINITION Immunostimulatory nucleic acid molecules.
ACCESSION BD009126
VERSION BD009126.1 GI:18637499
KEYWORDS JP 2001503267-A/78.
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Krieg,A.M. and Kline,J.N.
TITLE Immunostimulatory nucleic acid molecules
JOURNAL Patent: JP 2001503267-A 78 13-MAR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION
COMMENT OS Artificial Sequence
PN JP 2001503267-A/78
PD 13-MAR-2001
PF 30-OCT-1997 JP 1998520784
PR 30-OCT-1996 US 08/738652
PI ARTHUR M KRIEG,JOEL N KLINE
PC C07H21/00,C07H21/02,C07H21/04,A61K31/175,A61K31/335,A61K31/47,
PC A61K31/70
CC
FH Key Location/Qualifiers
FT source
FT 1..18
FT /organism='Artificial Sequence'.

FEATURES
source
1..18
/organism='synthetic construct'
/mol_type='genomic DNA'
/db_xref='taxon:32630'

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 96;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
| | | | | | | | | | | | | | | |
Db 18 ATGGCGCGCGCTGGGAGA 1

RESULT 168
BD069971/c
LOCUS BD069971 18 bp DNA linear PAT 27-AUG-2002
DEFINITION Use of nucleic acids containing unethylated CPG dinucleotide in
the treatment of LPS-associated disorders.
ACCESSION BD069971
VERSION BD069971.1 GI:22615574
KEYWORDS JP 2001513776-A/60.
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Schwartz,D.A. and Krieg,A.M.
TITLE Use of nucleic acids containing unethylated CPG dinucleotide in
the treatment of LPS-associated disorders
JOURNAL Patent: JP 2001513776-A 60 04-SEP-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION
COMMENT OS Artificial Sequence
PN JP 2001513776-A/60
PD 04-SEP-2001
PF 25-FEB-1998 JP 1998537810
PR 28-FEB-1997 US 60/039405
PI DAVID A SCHWARTZ,ARTHUR M KRIEG
PC A61K49/00,C07H21/02,C07H21/04,A01N43/04
CC synthetic oligonucleotide
FH Key Location/Qualifiers
FT source
FT 1..18
FT /organism='Artificial Sequence'.

FEATURES
source
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/organism='synthetic construct'
/mol_type='genomic DNA'
/db_xref='taxon:32630'

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 96;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
| | | | | | | | | | | | | | | |
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 169
BD205582/c
LOCUS BD205582 18 bp DNA linear PAT 17-JUL-2003
DEFINITION Method of controlling hematopoiesis by using CpG oligonucleotide.
ACCESSION BD205582
VERSION BD205582.1 GI:33015352
KEYWORDS JP 2002514397-A/72.
SOURCE synthetic construct
ORGANISM synthetic construct
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artificial sequences.
 1 (bases 1 to 16)
 REFERENCE
 AUTHORS
 TITLE
 JOURNAL
 COMMENT
 PN JP 2002514397-A/72
 PD 21-MAY-2002
 PF 14-MAY-1998 JP 2000547969
 PR 14-MAY-1998 US 60/085516,02-FEB-1999 US 09/241653 PT
 PC C12N15/09,A61K31/70,A61K39/39,C07H21/04//A61K45/00,C12N15/00
 CC Synthetic Sequence
 CH Key
 FT source
 FT Location/Qualifiers
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 /organism="Artificial Sequence"
 1..18
 /organism="synthetic construct"
 /mol_type="genomic DNA"
 /db_xref="taxon:32630"

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 96;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGGCGCTGGGAGA 18
 18 ATGGCGGCGCTGGGAGA 1

RESULT 170
 AR007293
 LOCUS
 DEFINITION
 Sequence 7 from patent US 5750390.
 ACCESSION
 AR007293
 VERSION
 AR007293.1 GI:3966777
 KEYWORDS
 Unknown.
 ORGANISM
 Unknown.
 REFERENCE
 1 (bases 1 to 16)
 AUTHORS
 Thompson,J.D. and Draper,K.G.
 TITLE
 Method and reagent for treatment of diseases caused by expression of the bcl-2 gene
 JOURNAL
 Patent: US 5750390-A 7 12-MAY-1998;
 FEATURES
 Location/Qualifiers
 1..16
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match 2.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 90;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 261 CCCGGTGCACCTGTG 276
 1 CCCGGTGCACCTGTG 16

Db

RESULT 171
 AR191948/c
 LOCUS
 DEFINITION
 Sequence 7436 from patent US 6346398.
 ACCESSION
 AR191948
 VERSION
 AR191948.1 GI:20237913
 KEYWORDS
 Unknown.
 ORGANISM
 Unknown.
 REFERENCE
 1 (bases 1 to 17)
 AUTHORS
 Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.

TITLE
 Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
 Patent: US 6346398-A 7436 12-FEB-2002;
 FEATURES
 Location/Qualifiers
 1..17
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match 2.5%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 11e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 563 GGATCCAGGATAACGGA 579
 17 GGATCCAGGATAACGGA 1

Db

RESULT 172
 AR325841/c
 LOCUS
 DEFINITION
 Sequence 3243 from patent US 6566127.
 ACCESSION
 AR325841
 VERSION
 AR325841.1 GI:33711649
 KEYWORDS
 Unknown.
 SOURCE
 Unknown.
 ORGANISM
 Unclassified.
 REFERENCE
 1 (bases 1 to 17)
 AUTHORS
 Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
 TITLE
 Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
 Patent: US 6566127-A 3243 20-MAY-2003;
 JOURNAL
 Patent: US 6566127-A 3243 20-MAY-2003;
 FEATURES
 Location/Qualifiers
 1..17
 /organism="unknown"
 /mol_type="unassigned RNA"

Query Match 2.5%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 11e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 563 GGATCCAGGATAACGGA 579
 17 GGATCCAGGATAACGGA 1

Db

RESULT 173
 AX224981/c
 LOCUS
 DEFINITION
 Sequence 135 from Patent WO0161030.
 ACCESSION
 AX224981
 VERSION
 AX224981.1 GI:15555054
 KEYWORDS
 Homo sapiens (human)
 SOURCE
 Homo sapiens
 ORGANISM
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE
 1
 AUTHORS
 Gray,D.M. and Bollon,A.P.
 TITLE
 Libraries of optimum subsequence regions of mrna and genomic dna for control of gene expression
 Patent: WO 0161030-A 135 23-AUG-2001;
 JOURNAL
 Cytoclonal Pharmaceuticals, Inc. (US) ; University of Texas at Dallas, Dept. of Molecular and Cell Biology (US); Lab. of Experimental Carcinogenesis; National Cancer Institute/NIH (US)
 FEATURES
 Location/Qualifiers
 1..20
 /organism="Homo sapiens"
 /mol_type="unassigned DNA"
 /db_xref="taxon:9606"

Query Match 2.3%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 1.7e+02;

SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
 AUTHORS Gray, D.M. and Bollon, A.P.
 TITLE Libraries of optimum subsequence regions of mrna and genomic dna
 for control of gene expression
 JOURNAL Patent: WO 0161030-A 136 23-AUG-2001;
 Cytoclonal Pharmaceuticals, Inc. (US); University of Texas at
 Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
 Experimental Carcinogenesis, National Cancer Institute/NIH (US)

FEATURES
 Location/Qualifiers
 source
 1..20
 /organism="Homo sapiens"
 /mol_type="unassigned DNA"
 /db_xref="taxon:9606"

Query Match 2.1%; Score 13.2; DB 1; Length 20;
 Best Local Similarity 83.3%; Pred. No. 2e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 300 CGCGCAGCACTCTCCCG 317
 Db 18 CGCGCCCACTCTCCCG 1

RESULT 179
 AR007295
 LOCUS AR007295 13 bp DNA linear PAT 04-DEC-1998
 DEFINITION Sequence 9 from patent US 5750390.
 ACCESSION AR007295
 VERSION AR007295.1 GI:3966779
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 13)
 AUTHORS Thompson, J.D. and Draper, K.G.
 TITLE Method and reagent for treatment of diseases caused by expression
 of the bcl-2 gene
 JOURNAL Patent: US 5750390-A 9 12-MAY-1998;
 FEATURES Location/Qualifiers
 source
 1..13
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 225 GGCTGCCCCCGC 237
 Db 1 GGCTGCCCCCGC 13

RESULT 180
 AR306720
 LOCUS AR306720 13 bp DNA linear PAT 12-JUN-2003
 DEFINITION Sequence 5 from patent US 6548657.
 ACCESSION AR306720
 VERSION AR306720.1 GI:31697045
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 13)
 AUTHORS Burgin, A., Beigelman, L. and Bellon, L.
 TITLE Method for screening nucleic acid catalysts
 JOURNAL Patent: US 6548657-A 5 15-APR-2003;
 FEATURES Location/Qualifiers
 source
 1..13
 /organism="unknown"

SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
 AUTHORS Gray, D.M. and Bollon, A.P.
 TITLE Libraries of optimum subsequence regions of mrna and genomic dna
 for control of gene expression
 JOURNAL Patent: WO 0161030-A 136 23-AUG-2001;
 Cytoclonal Pharmaceuticals, Inc. (US); University of Texas at
 Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
 Experimental Carcinogenesis, National Cancer Institute/NIH (US)

FEATURES
 Location/Qualifiers
 source
 1..20
 /organism="Homo sapiens"
 /mol_type="unassigned DNA"
 /db_xref="taxon:9606"

Query Match 2.1%; Score 13.2; DB 1; Length 20;
 Best Local Similarity 83.3%; Pred. No. 2e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 300 CGCGCAGCACTCTCCCG 317
 Db 18 CGCGCCCACTCTCCCG 1

RESULT 179
 AR007295
 LOCUS AR007295 13 bp DNA linear PAT 04-DEC-1998
 DEFINITION Sequence 9 from patent US 5750390.
 ACCESSION AR007295
 VERSION AR007295.1 GI:3966779
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 13)
 AUTHORS Thompson, J.D. and Draper, K.G.
 TITLE Method and reagent for treatment of diseases caused by expression
 of the bcl-2 gene
 JOURNAL Patent: US 5750390-A 9 12-MAY-1998;
 FEATURES Location/Qualifiers
 source
 1..13
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 225 GGCTGCCCCCGC 237
 Db 1 GGCTGCCCCCGC 13

RESULT 180
 AR306720
 LOCUS AR306720 13 bp DNA linear PAT 12-JUN-2003
 DEFINITION Sequence 5 from patent US 6548657.
 ACCESSION AR306720
 VERSION AR306720.1 GI:31697045
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 13)
 AUTHORS Burgin, A., Beigelman, L. and Bellon, L.
 TITLE Method for screening nucleic acid catalysts
 JOURNAL Patent: US 6548657-A 5 15-APR-2003;
 FEATURES Location/Qualifiers
 source
 1..13
 /organism="unknown"

/mol_type="genomic DNA"
 Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 365 CGCCCTTCACCGC 377
 Db 1 CGCCCTTCACCGC 13

RESULT 181
 AR306721
 LOCUS AR306721 13 bp DNA linear PAT 12-JUN-2003
 DEFINITION Sequence 6 from patent US 6548657.
 ACCESSION AR306721
 VERSION AR306721.1 GI:31697046
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 13)
 AUTHORS Burgin, A., Beigelman, L. and Bellon, L.
 TITLE Method for screening nucleic acid catalysts
 JOURNAL Patent: US 6548657-A 6 15-APR-2003;
 FEATURES Location/Qualifiers
 source
 1..13
 /organism="unknown"
 /mol_type="genomic DNA"

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 407 AGCTCTTCAGGGA 419
 Db 1 AGCTCTTCAGGGA 13

RESULT 182
 AR306723
 LOCUS AR306723 13 bp DNA linear PAT 12-JUN-2003
 DEFINITION Sequence 8 from patent US 6548657.
 ACCESSION AR306723
 VERSION AR306723.1 GI:31697048
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 13)
 AUTHORS Burgin, A., Beigelman, L. and Bellon, L.
 TITLE Method for screening nucleic acid catalysts
 JOURNAL Patent: US 6548657-A 8 15-APR-2003;
 FEATURES Location/Qualifiers
 source
 1..13
 /organism="unknown"
 /mol_type="genomic DNA"

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 533 CTGAGTACCTGAA 545
 Db 1 CTGAGTACCTGAA 13

RESULT 183
 AR306724
 LOCUS AR306724 13 bp DNA linear PAT 12-JUN-2003
 DEFINITION Sequence 9 from patent US 6548657.
 ACCESSION AR306724
 VERSION AR306724.1 GI:31697049


```

KEYWORDS      Unknown.
SOURCE        Unknown.
ORGANISM      Unclassified.
REFERENCE     1 (bases 1 to 13)
AUTHORS      Burgin,A., Beigelman,L. and Bellon,L.
TITLE        Method for screening nucleic acid catalysts
JOURNAL      Patent: US 6548657-A 9 15-APR-2003;
FEATURES     Location/Qualifiers
              1..13
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      452 TTGATTCGGTGG 464
Db      1 TTGATTCGGTGG 13

RESULT 184
AR306725      13 bp      DNA      linear      PAT 12-JUN-2003
LOCUS
DEFINITION    Sequence 10 from patent US 6548657.
ACCESSION    AR306725
VERSION      AR306725.1 GI:31697050
KEYWORDS
SOURCE        Unknown.
ORGANISM      Unclassified.
REFERENCE     1 (bases 1 to 13)
AUTHORS      Burgin,A., Beigelman,L. and Bellon,L.
TITLE        Method for screening nucleic acid catalysts
JOURNAL      Patent: US 6548657-A 10 15-APR-2003;
FEATURES     Location/Qualifiers
              1..13
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      47 TGAAGTACATCCA 59
Db      1 TGAAGTACATCCA 13

RESULT 185
AR306726      13 bp      DNA      linear      PAT 12-JUN-2003
LOCUS
DEFINITION    Sequence 11 from patent US 6548657.
ACCESSION    AR306726
VERSION      AR306726.1 GI:31697051
KEYWORDS
SOURCE        Unknown.
ORGANISM      Unclassified.
REFERENCE     1 (bases 1 to 13)
AUTHORS      Burgin,A., Beigelman,L. and Bellon,L.
TITLE        Method for screening nucleic acid catalysts
JOURNAL      Patent: US 6548657-A 11 15-APR-2003;
FEATURES     Location/Qualifiers
              1..13
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      47 TGAAGTACATCCA 59
Db      1 TGAAGTACATCCA 13

RESULT 186
AR306727      13 bp      DNA      linear      PAT 12-JUN-2003
LOCUS
DEFINITION    Sequence 12 from patent US 6548657.
ACCESSION    AR306727
VERSION      AR306727.1 GI:31697052
KEYWORDS
SOURCE        Unknown.
ORGANISM      Unclassified.
REFERENCE     1 (bases 1 to 13)
AUTHORS      Burgin,A., Beigelman,L. and Bellon,L.
TITLE        Method for screening nucleic acid catalysts
JOURNAL      Patent: US 6548657-A 12 15-APR-2003;
FEATURES     Location/Qualifiers
              1..13
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      169 CCCCATCCAGCCG 181
Db      1 CCCCATCCAGCCG 13

RESULT 187
AR306728      13 bp      DNA      linear      PAT 12-JUN-2003
LOCUS
DEFINITION    Sequence 13 from patent US 6548657.
ACCESSION    AR306728
VERSION      AR306728.1 GI:31697053
KEYWORDS
SOURCE        Unknown.
ORGANISM      Unclassified.
REFERENCE     1 (bases 1 to 13)
AUTHORS      Burgin,A., Beigelman,L. and Bellon,L.
TITLE        Method for screening nucleic acid catalysts
JOURNAL      Patent: US 6548657-A 13 15-APR-2003;
FEATURES     Location/Qualifiers
              1..13
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      561 CTGGATCCAGGAT 573
Db      1 CTGGATCCAGGAT 13

RESULT 188
AR399378      14 bp      DNA      linear      PAT 18-DEC-2003
LOCUS
DEFINITION    Sequence 13 from patent US 6620595.
ACCESSION    AR399378
VERSION      AR399378.1 GI:40141228
KEYWORDS
SOURCE        Unknown.
ORGANISM      Unclassified.
REFERENCE     1 (bases 1 to 14)
AUTHORS      Cannon,P.M. and Barcova,M.

```

TITLE Retroviral vectors comprising an enhanced 3' transcription

JOURNAL termination structure
Patent: US 6620595-A 13 16-SEP-2003;

FEATURES Location/Qualifiers

source

1..14

/organism="unknown"

/mol_type="genomic DNA"

Query Match 2.1%; Score 13; DB 1; Length 14;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 57 CCATTATAGCTG 69

Db 1 CCATTATAGCTG 13

RESULT 189

AX224971/c

LOCUS

Sequence 125 from Patent WO0161030.

AX224971

ACCESSION

VERSION AX224971.1 GI:15555044

KEYWORDS

SOURCE

ORGANISM

Homo sapiens (human)

REFERENCE

AUTHORS

TITLE

JOURNAL

FEATURES

source

1..20

/organism="Homo sapiens"

/mol_type="unassigned DNA"

/db_xref="taxon:9606"

Query Match 2.0%; Score 12.6; DB 1; Length 20;

Best Local Similarity 78.9%; Pred. No. 2.2e+02;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 233 CCGGCGCGCGCGCGCGGCC 251

Db 20 CAGGCCCGCGCGCGGCC 2

RESULT 190

AX224972/c

LOCUS

Sequence 126 from Patent WO0161030.

AX224972

ACCESSION

VERSION AX224972.1 GI:15555045

KEYWORDS

SOURCE

ORGANISM

Homo sapiens (human)

REFERENCE

AUTHORS

TITLE

JOURNAL

FEATURES

source

1..20

/organism="Homo sapiens"

/mol_type="unassigned DNA"

/db_xref="taxon:9606"

Query Match 2.0%; Score 12.6; DB 1; Length 20;

Best Local Similarity 78.9%; Pred. No. 2.2e+02;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 233 CCGGCGCGCGCGCGGCC 251

Db 19 CAGGCCCGCGCGCGGCC 1

RESULT 191

AX224974/c

LOCUS

Sequence 128 from Patent WO0161030.

AX224974

ACCESSION

VERSION AX224974.1 GI:15555047

KEYWORDS

SOURCE

ORGANISM

Homo sapiens (human)

REFERENCE

AUTHORS

TITLE

JOURNAL

FEATURES

source

1..20

/organism="Homo sapiens"

/mol_type="unassigned DNA"

/db_xref="taxon:9606"

Query Match 2.0%; Score 12.6; DB 1; Length 20;

Best Local Similarity 78.9%; Pred. No. 2.2e+02;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 235 GCGCGCGCGCGCGCGCTG 253

Db 20 GCGCGCGCGCGCGCGCG 2

RESULT 192

AX224976/c

LOCUS

Sequence 130 from Patent WO0161030.

AX224976

ACCESSION

VERSION AX224976.1 GI:15555049

KEYWORDS

SOURCE

ORGANISM

Homo sapiens (human)

REFERENCE

AUTHORS

TITLE

JOURNAL

FEATURES

source

1..20

/organism="Homo sapiens"

/mol_type="unassigned DNA"

/db_xref="taxon:9606"

Query Match 2.0%; Score 12.6; DB 1; Length 20;

Best Local Similarity 78.9%; Pred. No. 2.2e+02;

Matches	15; Conservative	0; Mismatches	4; Indels	0; Gaps	0;
QY	235	GGCGCGCGCGCGCGCGCTG	253		
Db	19	GGCGCGCGCGCGCGCGCGG	1		
RESULT 193					
AX224983/c					
LOCUS	AX224983	20 bp	DNA	linear	PAT 10-SEP-2001
DEFINITION	Sequence 137 from Patent WO0161030.				
ACCESSION	AX224983				
VERSION	AX224983.1	GI:15555056			
KEYWORDS	Homo sapiens (human)				
SOURCE	Homo sapiens				
ORGANISM	Homo sapiens				
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
AUTHORS	1				
TITLE	Gray,D.M. and Bollon,A.P.				
JOURNAL	Libraries of optimum subsequence regions of mrna and genomic dna for control of gene expression				
FEATURES	Patent: WO 0161030-A 137 23-AUG-2001; Cytoconal Pharmaceuticals, Inc. (US); University of Texas at Dallas, Dept. of Molecular and Cell Biology (US); Lab. of Experimental Carcinogenesis, National Cancer Institute/NIH (US)				
source	Location/Qualifiers				
Query Match	2.0%; Score 12.2; DB 1; Length 20;				
Best Local Similarity	82.4%; Pred. No. 2.4e+02;				
Matches	14; Conservative	0; Mismatches	3; Indels	0; Gaps	0;
QY	300	CGCGACGACATCTCTCCC	316		
Db	17	CGCGCCACATCTCTCCC	1		
RESULT 194					
AX007289					
LOCUS	AR007289	12 bp	DNA	linear	PAT 04-DEC-1998
DEFINITION	Sequence 3 from patent US 5750390.				
ACCESSION	AR007289				
VERSION	AR007289.1	GI:3966773			
KEYWORDS	Unknown.				
SOURCE	Unknown.				
ORGANISM	Unclassified.				
REFERENCE	1 (bases 1 to 12)				
AUTHORS	Thompson,J.D. and Draper,K.G.				
TITLE	Method and reagent for treatment of diseases caused by expression of the bcl-2 gene				
JOURNAL	Patent: US 5750390-A 3 12-MAY-1998;				
FEATURES	Location/Qualifiers				
source	1. .12				
Query Match	2.0%; Score 12; DB 1; Length 12;				
Best Local Similarity	100.0%; Pred. No. 1.5e+02;				
Matches	12; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
QY	46	ATGAAGTACATC	57		
Db	1	ATGAAGTACATC	12		
RESULT 195					
AX012033/c					
LOCUS	AR012033	12 bp	DNA	linear	PAT 04-DEC-1998

DEFINITION	Sequence 10 from patent US 5763186.				
ACCESSION	AR012033				
VERSION	AR012033.1	GI:3970023			
KEYWORDS	Unknown.				
SOURCE	Unknown.				
ORGANISM	Unclassified.				
REFERENCE	1 (bases 1 to 12)				
AUTHORS	Ludtke,D.N., Monahan,J.B. and Unger,J.T.				
TITLE	Use of antisense oligomers in a process for controlling contamination in nucleic acid amplification reactions				
JOURNAL	Patent: US 5763186-A 10 09-JUN-1998;				
FEATURES	Location/Qualifiers				
source	1. .12				
Query Match	2.0%; Score 12; DB 1; Length 12;				
Best Local Similarity	100.0%; Pred. No. 1.5e+02;				
Matches	12; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
QY	567	CCAGGATAACGG	578		
Db	12	CCAGGATAACGG	1		
RESULT 196					
AX241838/c					
LOCUS	AR241838	12 bp	DNA	linear	PAT 20-DEC-2002
DEFINITION	Sequence 126 from patent US 6472154.				
ACCESSION	AR241838				
VERSION	AR241838.1	GI:27287650			
KEYWORDS	Unknown.				
SOURCE	Unknown.				
ORGANISM	Unclassified.				
REFERENCE	1 (bases 1 to 12)				
AUTHORS	Garner,H.R., Wren,J.D., Minna,J.D. and Fondon,J.W. III.				
TITLE	Polymorphic repeats in human genes				
JOURNAL	Patent: US 6472154-A 126 29-OCT-2002;				
FEATURES	Location/Qualifiers				
source	1. .12				
Query Match	2.0%; Score 12; DB 1; Length 12;				
Best Local Similarity	100.0%; Pred. No. 1.5e+02;				
Matches	12; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
QY	115	CCCCCGGGGCC	126		
Db	12	CCCCCGGGGCC	1		
RESULT 197					
AX084963					
LOCUS	AX084963	12 bp	DNA	linear	PAT 09-MAR-2001
DEFINITION	Sequence 140 from Patent WO0113117.				
ACCESSION	AX084963				
VERSION	AX084963.1	GI:13275111			
KEYWORDS	synthetic construct				
SOURCE	synthetic construct				
ORGANISM	artificial sequences.				
REFERENCE	1				
AUTHORS	Herath,H.M.				
TITLE	Proteins, genes and their use for diagnosis and treatment of breast cancer				
JOURNAL	Patent: WO 0113117-A 140 22-FEB-2001;				
FEATURES	Location/Qualifiers				
source	1. .12				
Query Match	2.0%; Score 12; DB 1; Length 12;				
Best Local Similarity	100.0%; Pred. No. 1.5e+02;				
Matches	12; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
QY	46	ATGAAGTACATC	57		
Db	1	ATGAAGTACATC	12		
RESULT 195					
AX012033/c					
LOCUS	AR012033	12 bp	DNA	linear	PAT 04-DEC-1998

```

Query Match
Best Local Similarity 2.0%; Score 12; DB 1; Length 12;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Probe"

QY 397 GTGGTGGAGGAG 408
Db 1 GTGGTGGAGGAG 12

RESULT 198
AX085035/c
LOCUS AX085035 12 bp DNA linear PAT 09-MAR-2001
DEFINITION Sequence 212 from Patent WO0113117.
ACCESSION AX085035
VERSION AX085035.1 GI:13275183
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Herath,H.M.
TITLE Proteins, genes and their use for diagnosis and treatment of breast
JOURNAL Cancer
PATENT: WO 0113117-A 212 22-FEB-2001;
Oxford Glycosciences (UK) Limited (GB)
FEATURES
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Probe"

Query Match
Best Local Similarity 2.0%; Score 12; DB 1; Length 12;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 558 CACCTGGATCCA 569
Db 12 CACCTGGATCCA 1

RESULT 199
AX224973/c
LOCUS AX224973 20 bp DNA linear PAT 10-SEP-2001
DEFINITION Sequence 127 from Patent WO0161030.
ACCESSION AX224973
VERSION AX224973.1 GI:15555046
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Gray,D.M. and Bollon,A.P.
TITLE Libraries of optimum subsequence regions of mrna and genomic dna
JOURNAL for control of gene expression
PATENT: WO 0161030-A 127 23-AUG-2001;
Cyroclonal Pharmaceuticals, Inc. (US); University of Texas at
Dallas, Dept. of Molecular and Cell Biology (US); Lab. of
Experimental Carcinogenesis, National Cancer Institute/NIH (US)
FEATURES
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
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Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 231 CCCCGCGCCCGCGCGGGCG 250
Db 20 CGCAGCGCCCGCGCGGGCG 1

RESULT 200
AX377551/c
LOCUS AX377551 39 bp DNA linear PAT 18-MAR-2002
DEFINITION Sequence 28 from Patent WO0212553.
ACCESSION AX377551
VERSION AX377551.1 GI:19573737
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Kappel,A., Polakowski,T., Pignot,M., Windhab,N., Behrensdoerf,H. and
Muth,J.
TITLE Method for detecting mutations in nucleotide sequences
JOURNAL Patent: WO 0212553-A 28 14-FEB-2002;
Nanogen Recognomics GmbH (DE)
FEATURES
source
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 1.9%; Score 11.8; DB 1; Length 39;
Matches 16; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 87 GTGGGATCGGAGATGTGGCG 109
Db 35 GCGGGATCGGCTGGATGGGCG 13

RESULT 201
AX377550
LOCUS AX377550 39 bp DNA linear PAT 18-MAR-2002
DEFINITION Sequence 27 from Patent WO0212553.
ACCESSION AX377550
VERSION AX377550.1 GI:19573736
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Kappel,A., Polakowski,T., Pignot,M., Windhab,N., Behrensdoerf,H. and
Muth,J.
TITLE Method for detecting mutations in nucleotide sequences
JOURNAL Patent: WO 0212553-A 27 14-FEB-2002;
Nanogen Recognomics GmbH (DE)
FEATURES
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/db_xref="taxon:9606"

Query Match
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Matches 16; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 87 GTGGGATCGGAGATGTGGCG 109
Db 7 GCGGGATCGGCTGGATGGGCG 29

RESULT 202
AX224990/c
LOCUS AX224990 20 bp DNA linear PAT 10-SEP-2001

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Q.Y. 353 AGCTGCACCTG 363


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/organism="Homo sapiens"
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Query Match
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Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 279 CCACCTGGCCC 289
DB 11 CCACCTGGCCC 1

RESULT 212
AX628101/c AX628101 11 bp DNA linear PAT 21-FEB-2003
LOCUS
DEFINITION Sequence 5142 from Patent WO02053774.
ACCESSION AX628101
VERSION AX628101.1 GI:28456139
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.

REFERENCE
1 Petersohn,D., Conradt,M. and Hofmann,K.
AUTHORS Method for determining homeostasis of the skin
TITLE Patent: WO 02053774-A 5142 11-JUL-2002;
JOURNAL Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
Location/Qualifiers
source
1. 11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 1.8%; Score 11; DB 1; Length 11;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 509 TGGACACATC 519
DB 11 TGGACACATC 1

RESULT 213
AX630057 AX630057 11 bp DNA linear PAT 21-FEB-2003
LOCUS
DEFINITION Sequence 7098 from Patent WO02053774.
ACCESSION AX630057
VERSION AX630057.1 GI:28458095
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.

REFERENCE
1 Petersohn,D., Conradt,M. and Hofmann,K.
AUTHORS Method for determining homeostasis of the skin
TITLE Patent: WO 02053774-A 7098 11-JUL-2002;
JOURNAL Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
Location/Qualifiers
source
1. 11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 1.8%; Score 11; DB 1; Length 11;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 591 TGCATCTGGTG 601
DB 1 TGCATCTGGTG 11

/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

RESULT 214
AX631159 AX631159 11 bp DNA linear PAT 21-FEB-2003
LOCUS
DEFINITION Sequence 8200 from Patent WO02053774.
ACCESSION AX631159
VERSION AX631159.1 GI:28459203
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.

REFERENCE
1 Petersohn,D., Conradt,M. and Hofmann,K.
AUTHORS Method for determining homeostasis of the skin
TITLE Patent: WO 02053774-A 8200 11-JUL-2002;
JOURNAL Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
Location/Qualifiers
source
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/db_xref="taxon:9606"

Query Match
Best Local Similarity 1.8%; Score 11; DB 1; Length 11;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 269 CACCTGTGGTC 279
DB 1 CACCTGTGGTC 11

RESULT 215
AX631744 AX631744 11 bp DNA linear PAT 21-FEB-2003
LOCUS
DEFINITION Sequence 8786 from Patent WO02053774.
ACCESSION AX631744
VERSION AX631744.1 GI:28459851
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.

REFERENCE
1 Petersohn,D., Conradt,M. and Hofmann,K.
AUTHORS Method for determining homeostasis of the skin
TITLE Patent: WO 02053774-A 8786 11-JUL-2002;
JOURNAL Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
Location/Qualifiers
source
1. 11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 1.8%; Score 11; DB 1; Length 11;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGC 11
DB 1 ATGGCGCAGC 11

RESULT 216
AX241838 AX241838 12 bp DNA linear PAT 20-DEC-2002
LOCUS
DEFINITION Sequence 126 from patent US 6472154.
ACCESSION AR241838
VERSION AR241838.1 GI:27287650
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.

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Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS Garner H.R., Wren J.D., Minna J.D. and Fondon, J.W. III.
TITLE Polymorphic repeats in human genes
JOURNAL Patent: US 6472154-A 126 29-OCT-2002;
FEATURES
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                /organism="unknown"
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Query Match
Best Local Similarity 1.8%; Score 11; DB 1; Length 12;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 114 GCCCGGGGGG 124
    |||||
Db 2 GCCCGGGGGG 12

RESULT 217
AR146357/c
LOCUS AR146357 12 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 69 from patent US 6218371.
ACCESSION AR146357
VERSION AR146357.1 GI:15109546
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 12)
AUTHORS Krieg, A.M. and Weiner, G.
TITLE Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines
JOURNAL Patent: US 6218371-A 59 17-APR-2001;
FEATURES
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Query Match
Best Local Similarity 1.8%; Score 11; DB 1; Length 12;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
    |||||
Db 12 GCGGCACGCTG 2

RESULT 218
AR154740/c
LOCUS AR154740 12 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 69 from patent US 6239116.
ACCESSION AR154740
VERSION AR154740.1 GI:15122793
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 12)
AUTHORS Krieg, A.M. and Kline, J.N.
TITLE Immunostimulatory nucleic acid molecules
JOURNAL Patent: US 6239116-A 59 29-MAY-2001;
FEATURES
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        Location/Qualifiers
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Query Match
Best Local Similarity 1.8%; Score 11; DB 1; Length 12;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
    |||||
Db 12 GCGGCACGCTG 2

Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS Krieg, A.M. and Weiner, G.
TITLE Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines
JOURNAL Patent: US 6218371-A 59 17-APR-2001;
FEATURES
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                /organism="synthetic construct"
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Query Match
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Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
    |||||
Db 12 GCGGCACGCTG 2

RESULT 220
BD261280/c
LOCUS BD261280 12 bp DNA linear PAT 17-JUL-2003
DEFINITION Methods and products for inducing mucosal immunity.
ACCESSION BD261280
VERSION BD261280.1 GI:33071050
KEYWORDS
SOURCE synthetic construct
ORGANISM artificial sequences.
REFERENCE 1 (bases 1 to 12)
AUTHORS Mccluskie, M.J. and Davis, H.L.
TITLE Methods and products for inducing mucosal immunity
JOURNAL Patent: JP 2002516294-A 59 04-JUN-2002;
JOURNAL LOEB HEALTH RESEARCH INSTITUTE AT THE OTTAWA HOSPITAL, CORY PHARMACEUTICALS GROUP INC
COMMENT
    OS Artificial Sequence
    PN JP 2002516294-A/59
    PD 04-JUN-2002
    PF 21-MAY-1999 JP 2000550515
    PR 22-MAY-1998 US 60/086393
    PI MICHAEL J MCCLUSKIE, HEATHER L DAVIS
    PC A61K39/00, A61K9/10, A61K9/16, A61K9/51, A61K31/70, A61K39/
    39,
    PC A61P31/00, A61P35/00, A61P37/00

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CC immunostimulatory synthetic oligonucleotide
FH Key Location/Qualifiers
FT source 1..12
FT /organism='Artificial Sequence'.
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    /db_xref='taxon:32630'
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Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2
RESULT 221
BD267885/c
LOCUS
DEFINITION
  Methods for the prevention and treatment of parasitic infections
  and related diseases using CPG oligonucleotides.
ACCESSION
  BD267885
VERSION
  JP 2002513763-A/58
KEYWORDS
  synthetic construct
SOURCE
  artificial construct
  1 (bases 1 to 12)
REFERENCE
  Granzinski,R.A., Krieg,A.M., Davis,H.L. and Hoffman,S.L.
  Methods for the prevention and treatment of parasitic infections
  and related diseases using CPG oligonucleotides.
  Patent: JP 2002513763-A 58 14-MAY-2002;
  UNIVERSITY OF IOWA RESEARCH FOUNDATION, OTTAWA CIVIC LOEB RESEARCH
  INSTITUTE, UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY
  OF THE NAVY
COMMENT
  OS Artificial Sequence
  PN JP 2002513763-A/58
  PD 14-MAY-2002
  PF 06-MAY-1999 JP 2000546780
  PR 06-MAY-1998 US 60/084512
  PI ROBERT A GRANZINSKI,ARTHUR M KRIEG,HEATHER L DAVIS,STEPHEN L
  PI HOFFMAN
  PC A61K31/711,A61K38/00,A61K38/22,A61K45/00,A61P31/00,
  PC A61P33/00//
  PC C12N15/09,A61K37/02,A61K37/24,C12N15/00
CC Synthetic Sequence
FH Key Location/Qualifiers
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FT /organism='Artificial Sequence'.
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Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2
RESULT 222
BD270786/c
LOCUS
DEFINITION
  Stereoisomer of Cpg oligonucleotide and method relating thereto.
ACCESSION
  BD270786
VERSION
  BD270786.1 GI:33080554

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KEYWORDS
  JP 2002521489-A/59.
  synthetic construct
  synthetic construct
  artificial sequences.
  1 (bases 1 to 12)
REFERENCE
  Krieg,A.M.
  Stereoisomer of Cpg oligonucleotide and method relating thereto
  Patent: JP 2002521489-A 59 16-JUL-2002;
  UNIVERSITY OF IOWA RESEARCH FOUNDATION
JOURNAL
  OS Artificial Sequence
  PN JP 2002521489-A/59
  PD 16-JUL-2002
  PF 27-JUL-1999 JP 2000562385
  PR 27-JUL-1998 US 60/094370
  PI ARTHUR M KRIEG
  PC A61K31/711,A61P11/06,A61P17/00,A61P27/02,A61P29/00,A61P31/00,
  PC A61P31/00,
  PC A61P35/00,A61P37/04,A61P37/06,A61P37/08
CC Synthetic
FH Key Location/Qualifiers
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FT /organism='Artificial Sequence'.
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    /db_xref='taxon:32630'
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Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2
RESULT 223
AR213859/c
LOCUS
DEFINITION
  Sequence 59 from patent US 6406705.
ACCESSION
  AR213859
VERSION
  AR213859.1 GI:23311258
KEYWORDS
  Unknown.
  Unknown.
  Unclassified.
  1 (bases 1 to 12)
REFERENCE
  Davis,H.L., Schorr,J. and Krieg,A.M.
  Use of nucleic acids containing unmethylated CpG dinucleotide as an
  adjuvant
  Patent: US 6406705-A 59 18-JUN-2002;
JOURNAL
  Patent: US 6406705-A 59 18-JUN-2002;
FEATURES
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Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2
RESULT 224
AR222229/c
LOCUS
DEFINITION
  Sequence 63 from patent US 6429199.
ACCESSION
  AR222229
VERSION
  AR222229.1 GI:23329694
KEYWORDS

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SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS Krieg,A.M. and Hartmann,G.
TITLE Immunostimulatory nucleic acid molecules for activating dendritic cells
JOURNAL Patent: US 6429199-A 63 06-AUG-2002;
FEATURES Location/Qualifiers
source 1..12
/organism="genomic DNA"
/mol_type="genomic DNA"

Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2

RESULT 225
LOCUS AR432490/c 12 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 69 from patent US 6653292.
ACCESSION AR432490
VERSION AR432490.1 GI:40194825
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS Krieg,A.M. and Weiher,G.
TITLE Method of treating cancer using immunostimulatory oligonucleotides
JOURNAL Patent: US 6653292-A 69 25-NOV-2003;
FEATURES Location/Qualifiers
source 1..12
/organism="genomic DNA"
/mol_type="genomic DNA"

Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2

RESULT 226
LOCUS AX098968/c 12 bp DNA linear PAT 02-APR-2001
DEFINITION Sequence 31 from Patent WO0120026.
ACCESSION AX098968
VERSION AX098968.1 GI:13538178
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Wojnowski,L. and Huestert,E.
TITLE Polymorphisms in the human hpvr gene and their use in diagnostic and therapeutic applications
JOURNAL Patent: WO 0120026-A 31 22-MAR-2001;
Epidaurus Biotechnology AG (DE)
FEATURES Location/Qualifiers
source 1..12
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="artificial sequence"

Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2

RESULT 227
LOCUS AX103879/c 12 bp DNA linear PAT 30-APR-2001
DEFINITION Sequence 71 from Patent WO0122972.
ACCESSION AX103879
VERSION AX103879.1 GI:13920076
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Krieg,A.M., Schetter,C. and Vollmer,J.C.
TITLE Immunostimulatory nucleic acids
JOURNAL Patent: WO 0122972-A 71 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical GmbH (DE)
FEATURES Location/Qualifiers
source 1..12
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2

RESULT 228
LOCUS AX105175/c 12 bp DNA linear PAT 30-APR-2001
DEFINITION Sequence 74 from Patent WO0122990.
ACCESSION AX105175
VERSION AX105175.1 GI:13921325
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Hartmann,G.D., Bratzler,R.L. and Krieg,A.U.
TITLE Methods related to immunostimulatory nucleic acid-induced interferon
JOURNAL Patent: WO 0122990-A 74 05-APR-2001;
Coley Pharmaceutical Group, Inc. (US) ; UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
FEATURES Location/Qualifiers
source 1..12
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Synthetic Oligonucleotide"

Query Match 1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCACGCTG 13
DB 12 GCGGCACGCTG 2

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RESULT 229
AX136993/c
LOCUS          12 bp      DNA          linear          PAT 30-MAY-2001
DEFINITION     Sequence 67 from Patent EP1089900.
ACCESSION      AX136993
VERSION        AX136993.1  GI:14273340
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       artificial sequences.
REFERENCE      1
AUTHORS        Hustert, E., Wojnowski, L. and Eiselt, R.
TITLE          Polymorphisms in the human cyp3a4, cyp3a7 and hpxr genes and their
JOURNAL        use in diagnostic and therapeutic applications
JOURNAL        Patent: EP 1089900-A 67 04-APR-2001;
FEATURES       Epidauros Biotechnologie AG (DE)
SOURCE         Location/Qualifiers
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               /mol_type="unassigned DNA"
               /db_xref="taxon:32630"
               /note="DNA"

Query Match          1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      267  GCCACCTGTGG 277
DB      11  GCCACCTGTGG 1

RESULT 230
AX355490/c
LOCUS          12 bp      DNA          linear          PAT 06-FEB-2002
DEFINITION     Sequence 518 from Patent WO0197843.
ACCESSION      AX355490
VERSION        AX355490.1  GI:18620158
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       artificial sequences.
REFERENCE      1
AUTHORS        Weiner, G. and Hartmann, G.
TITLE          Methods for enhancing antibody-induced cell lysis and treating
JOURNAL        cancer
JOURNAL        Patent: WO 0197843-A 518 27-DEC-2001;
FEATURES       UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
SOURCE         Location/Qualifiers
               1..12
               /organism="synthetic construct"
               /mol_type="unassigned DNA"
               /db_xref="taxon:32630"
               /note="Synthetic oligonucleotide-phosphorothioate backbone"

Query Match          1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3  GGCGCACGCTG 13
DB      12  GGCGCACGCTG 2

RESULT 231
AX455596/c
LOCUS          12 bp      DNA          linear          PAT 06-JUL-2002
DEFINITION     Sequence 73 from Patent WO0222809.
ACCESSION      AX455596
VERSION        AX455596.1  GI:121714664
KEYWORDS       synthetic construct
SOURCE         synthetic construct

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ORGANISM       synthetic construct
REFERENCE      1
AUTHORS        Bauer, S., Lipford, G. and Wagner, H.
TITLE          Process for high throughput screening of cpg-based
JOURNAL        immuno-agonist/antagonist
JOURNAL        Patent: WO 0222809-A 73 21-MAR-2002;
FEATURES       Coley Pharmaceutical GmbH (DE)
SOURCE         Location/Qualifiers
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               /db_xref="taxon:32630"
               /note="Synthetic oligonucleotide"

Query Match          1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3  GGCGCACGCTG 13
DB      12  GGCGCACGCTG 2

RESULT 232
AX546932/c
LOCUS          12 bp      DNA          linear          PAT 01-MAR-2003
DEFINITION     Sequence 71 from Patent WO02053141.
ACCESSION      AX546932
VERSION        AX546932.1  GI:25812076
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       artificial sequences.
REFERENCE      1
AUTHORS        Bratler, R.L.
TITLE          Inhibition of angiogenesis by nucleic acids
JOURNAL        Patent: WO 02053141-A 71 11-JUL-2002;
JOURNAL        Coley Pharmaceutical Group, Inc. (US)
FEATURES       Location/Qualifiers
SOURCE         1..12
               /organism="synthetic construct"
               /mol_type="unassigned DNA"
               /db_xref="taxon:32630"
               /note="Synthetic Sequence"

Query Match          1.8%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3  GGCGCACGCTG 13
DB      12  GGCGCACGCTG 2

RESULT 233
AX786568/c
LOCUS          12 bp      DNA          linear          PAT 17-JUL-2003
DEFINITION     Sequence 59 from Patent WO03030934.
ACCESSION      AX786568
VERSION        AX786568.1  GI:32953989
KEYWORDS       Homo sapiens (human)
SOURCE         Homo sapiens
ORGANISM       Homo sapiens
REFERENCE      1
AUTHORS        Babin, L.A. and Hecker, R.
TITLE          Cpg formulations and related methods
JOURNAL        Patent: WO 03030934-A 59 17-APR-2003;
JOURNAL        QIAGEN GmbH (DE); University of Saskatchewan (CA)
FEATURES       Location/Qualifiers
SOURCE         1..12

```


OM nucleic - nucleic search, using sw model

Run on: September 22, 2004, 08:55:17 ; Search time 2 Seconds

(without alignments)

2.949 Million cell updates/sec

Title: US-09-375-514B-22

Perfect score: 615

Sequence: 1 atggcgacgtcgggagac.....ctgggtgatgtgctctgggc 615

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 259 seqs, 4795 residues

Total number of hits satisfying chosen parameters: 518

Minimum DB seq length: 10

Maximum DB seq length: 40

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 267 summaries

Database : rng22.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	36	5.9	36	1	AAQ51961 BCL-2 mRNA ribozym
2	33	5.4	33	1	AAQ51951 BCL-2 mRNA ribozym
3	29	4.7	29	1	ABX13065 Human bcl-2 PCR pr
4	28	4.6	28	1	AAQ51954 BCL-2 mRNA ribozym
5	27	4.4	27	1	AAQ51954 Human Bcl-2 mRNA p
6	25.4	4.1	27	1	AAH46863 Human Bcl-2 mutage
7	25.4	4.1	27	1	AAH45302 Human Bcl-2 mutage
8	25	4.1	25	1	AAQ73296 Bcl-2 specific gen
9	24.4	4.0	26	1	ABX63514 Human Bcl2 PCR pri
10	24.4	4.0	26	1	ABX63513 Human Bcl2 PCR pri
11	24	3.9	24	1	AAQ76092 BCL-2 PCR primer #
12	24	3.9	24	1	Human BCL-2 PCR pr
13	24	3.9	24	1	AAQ52487 Fluorescent probe
14	24	3.9	24	1	ABX85362 Bcl-2 related olig
15	24	3.9	24	1	ABK15648 Bcl-2 RNA-DNA hybr
16	24	3.7	23	1	AAQ51950 BCL-2 mRNA ribozym
17	23	3.7	23	1	AAQ26355 Bcl-2 antisense ol
18	23	3.7	23	1	AAQ26353 Bcl-2 antisense ol
19	22.4	3.6	24	1	AAQ36054 Bcl-2 reverse PCR
20	22.4	3.6	24	1	AAV81830 Mouse bcl-2 revers
21	22.4	3.6	24	1	AAQ26250 Reverse primer for
22	22.4	3.6	24	1	AAQ88587 PCR primer for mcl
23	22.4	3.6	24	1	AAQ28900 Reverse primer for
24	22.4	3.6	24	1	AAQ28801 Mouse bcl-2 revers
25	22	3.6	22	1	AAQ51952 BCL-2 mRNA ribozym
26	22	3.6	22	1	AAQ65038 Bcl2 RNA RT-PCR pr
27	21	3.4	21	1	AAQ65038 Bcl-2 related olig
28	21	3.4	21	1	ABN85360 Bcl-2 related olig
29	20	3.3	20	1	AAQ33695 Human BCL2 cDNA se
30	20	3.3	20	1	AAQ33695 Human bcl-2 antis
31	20	3.3	20	1	AAV19653 Antisense oligonuc
32	20	3.3	20	1	AAQ27537 Synthetic RNA sequ
33	20	3.3	20	1	AAQ37380 PCR primer for hum

34	20	3.3	20	1	AAQ515629 Human Bcl-2 protei
35	20	3.3	20	1	AAQ515633 Human Bcl-2 protei
36	20	3.3	20	1	AAQ515640 Human Bcl-2 protei
37	20	3.3	20	1	AAQ515642 Human Bcl-2 protei
38	20	3.3	20	1	AAQ515628 Human Bcl-2 protei
39	20	3.3	20	1	AAQ515631 Human Bcl-2 protei
40	20	3.3	20	1	AAQ515641 Human Bcl-2 protei
41	20	3.3	20	1	AAQ515643 Human Bcl-2 protei
42	20	3.3	20	1	AAQ515630 Human Bcl-2 protei
43	20	3.3	20	1	AAQ515633 Human Bcl-2 protei
44	20	3.3	20	1	AAQ515637 Human Bcl-2 protei
45	20	3.3	20	1	AAQ515635 Human Bcl-2 protei
46	20	3.3	20	1	AAQ515634 Human Bcl-2 protei
47	20	3.3	20	1	AAQ515646 Human Bcl-2 protei
48	20	3.3	20	1	AAQ515627 Human Bcl-2 protei
49	20	3.3	20	1	AAQ515638 Human Bcl-2 protei
50	20	3.3	20	1	AAQ515632 Human Bcl-2 protei
51	20	3.3	20	1	AAQ515636 Human Bcl-2 protei
52	20	3.3	20	1	ABK30266 Bcl-2-targeting an
53	20	3.3	20	1	ABQ78524 Antisense oligodeo
54	20	3.3	20	1	ABK52485 PCR primer #1 for
55	20	3.3	20	1	ABK52486 PCR primer #2 for
56	20	3.3	20	1	ABL54151 Bcl-2 antisense ol
57	20	3.3	20	1	ABT16736 Bcl-2 PCR primer S
58	20	3.3	20	1	ACC99688 Bcl2 PCR primer SE
59	20	3.3	20	1	ADC66004 Phosphorothioate c
60	19	3.1	19	1	AAQ51957 BCL-2 mRNA ribozym
61	19	3.1	19	1	AAQ51958 BCL-2 mRNA ribozym
62	19	3.1	19	1	AAQ51960 BCL-2 mRNA ribozym
63	19	3.1	19	1	AAQ35740 PKAlpha primer-pa
64	19	3.1	19	1	ABN88834 Human Bcl-2 PCR pr
65	19	3.1	20	1	AAQ515645 Human Bcl-2 protei
66	18.4	3.0	20	1	AAQ35732 Oligonucleotide D0
67	18.4	3.0	20	1	AAQ35730 Bcl-2 antisense ol
68	18.4	3.0	20	1	AAQ09086 Tumour necrosis fa
69	18.4	3.0	20	1	AAH48720 Proto-oncogene bcl
70	18.4	3.0	20	1	AAH48721 Proto-oncogene bcl
71	18.4	3.0	20	1	AAQ515644 Human Bcl-2 protei
72	18.2	3.0	19	1	AAQ65072 Human bcl genes an
73	18	2.9	18	1	AAQ86659 Bcl-2 antisense ol
74	18	2.9	18	1	AAV52545 Unmethylated CpG d
75	18	2.9	18	1	AAV28181 Antisense oligonuc
76	18	2.9	18	1	AAV27719 Immunostimulatory
77	18	2.9	18	1	AAV19667 Human bcl-2 antis
78	18	2.9	18	1	AAZ41948 IL-12 secretion in
79	18	2.9	18	1	AAZ41905 IL-12 secretion in
80	18	2.9	18	1	AAQ78803 HPV fusion protein
81	18	2.9	18	1	AAV99434 Antisense oligonuc
82	18	2.9	18	1	AAZ31944 CpG adjuvant oligo
83	18	2.9	18	1	AAQ32536 Synthetic RNA sequ
84	18	2.9	18	1	AAQ18702 Target bcl-2 anti
85	18	2.9	18	1	AAQ88537 Cytosine-guanosine
86	18	2.9	18	1	AAQ33514 BCL2-targeted anti
87	18	2.9	18	1	AAQ23693 Deletion sequenc
88	18	2.9	18	1	AAZ60975 Nucleotide sequenc
89	18	2.9	18	1	AAZ48024 Immune remodeling
90	18	2.9	18	1	AAZ47981 Immune remodeling
91	18	2.9	18	1	AAQ44470 Phosphorothioate o
92	18	2.9	18	1	AAQ87997 BBTE-labeled oligo
93	18	2.9	18	1	AAQ46800 Human Bcl-2 gene a
94	18	2.9	18	1	AAQ47850 Immunostimulatory
95	18	2.9	18	1	AAQ38517 Oligonucleotide us
96	18	2.9	18	1	AAQ90450 CpG adjuvant oligo
97	18	2.9	18	1	AAQ38003 CpG motif for immu
98	18	2.9	18	1	AAQ38660 Human Bcl-2 therap
99	18	2.9	18	1	AAQ39264 CpG immunostimulat
100	18	2.9	18	1	AAQ47680 Parasitic infectio
101	18	2.9	18	1	AAQ47643 Parasitic infectio
102	18	2.9	18	1	AAQ31620 Human Bcl-2 antise
103	18	2.9	18	1	AAQ60278 Immunostimulatory
104	18	2.9	18	1	AAQ5037 Bcl2 antisense seq
105	18	2.9	18	1	AAQ84137 Immunostimulatory
106	18	2.9	18	1	AAH20395 CpG motif containi

C 253 12 2.0 12 1 ABI175178 Oligonucleotide pr
C 254 12 2.0 12 1 ABH84990 Oligonucleotide pr
C 255 12 2.0 12 1 ABK90357 Bcl-2-targeting an
C 256 12 2.0 12 1 ABX79801 ESR polymorphic DN
C 257 12 2.0 12 1 ABF38253 Oligonucleotide SE
C 258 12 2.0 12 1 ABH40339 Oligonucleotide SE
C 259 12 2.0 12 1 ABH40339 Oligonucleotide SE
C 260 12 2.0 12 1 ABF3977 Oligonucleotide SE
C 261 12 2.0 12 1 ABF96336 Oligonucleotide SE
C 262 12 2.0 12 1 ABF38252 Oligonucleotide SE
C 263 12 2.0 12 1 ABH40338 Oligonucleotide SE
C 264 12 2.0 12 1 ABH11327 Oligonucleotide SE
C 265 12 2.0 12 1 ABH33976 Oligonucleotide SE
C 266 12 2.0 12 1 ABF96337 Oligonucleotide SE
C 267 12 2.0 12 1 ABH11326 Oligonucleotide SE
Mutated LRP5 exon

ALIGNMENTS

RESULT 1
AAQ51961
ID AAQ51961 standard; RNA; 36 BP.
XX
AC AAQ51961;
XX
DT 25-MAR-2003 (revised)
DT 26-MAY-1994 (first entry)
XX
XX BCL-2 mRNA ribozyme cleavable nucleotide (1997).
XX
KW Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
XX
OS Homo sapiens.
XX
PN WO9323057-A1.
XX
XX 25-NOV-1993.
XX
XX 13-MAY-1993; 93WO-US004573.
XX
PR 14-MAY-1992; 92US-00882822.
PR 14-MAY-1992; 92US-00882885.
PR 26-AUG-1992; 92US-00936110.
PR 26-AUG-1992; 92US-00936421.
PR 26-AUG-1992; 92US-00936422.
PR 26-AUG-1992; 92US-00936531.
PR 26-AUG-1992; 92US-00936532.
PR 07-DEC-1992; 92US-00987131.
PR 19-JAN-1993; 93US-00006122.
PR 19-JAN-1993; 93US-00008910.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Thompson JD, Draper KG;
XX
XX WPI; 1993-386203/48.
XX
XX New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
PT with tumours or mRNA expressed from gene encoding multiple drug
PT resistance.
XX
XX Claim 3; Fig 6; 69pp; English.
XX
XX The sequences given in AAQ51825-2286 represent areas of mRNAs which are
CC associated with development or maintenance of chronic myelogenous

CC leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
CC lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
CC leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
CC The full length mRNAs containing these target sequences, encode aberrant
CC cellular proteins which are able to control cellular proliferation and
CC are directly linked to a leukemic phenotype. These target sequences are
CC identified by the ribozyme of the invention. The ribozymes are formed in a
CC hammerhead motif, but may also be formed in the motif of a hairpin.
CC hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
CC may be used to inhibit the development or expression of a transformed
CC phenotype in man and other animals by modulating expression of the
CC corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
CC and transformed cells elicits inhibition of the transformed state.
CC Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
CC mechanism of drug resistance used by transformed cells and thus enhances
CC drug therapies for tumours. The ribozymes may also be used to study
CC genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
CC correct PN field.)
XX
SQ Sequence 36 BP; 10 A; 13 C; 8 G; 0 T; 5 U; 0 Other;
Query Match 5.9%; Score 36; DB 1; Length 36;
Best Local Similarity 86.1%; Pred. No. 3;
Matches 31; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy 539 ACCTGAACCGGCACCTGCACACCTGCATCCAGGATA 574
Db 1 ACCUGAACCGGCACCGGCACACCGGCACCGGAGCAAGGAUA 36
|||||
|||||

RESULT 2

AAQ51951
ID AAQ51951 standard; RNA; 33 BP.
XX
AC AAQ51951;
XX
DT 25-MAR-2003 (revised)
DT 26-MAY-1994 (first entry)
XX
XX BCL-2 mRNA ribozyme cleavable nucleotide (1592).
XX
KW Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
XX
OS Homo sapiens.
XX
XX WO9323057-A1.
XX
XX 25-NOV-1993.
XX
XX 13-MAY-1993; 93WO-US004573.
XX
PR 14-MAY-1992; 92US-00882822.
PR 14-MAY-1992; 92US-00882885.
PR 26-AUG-1992; 92US-00936110.
PR 26-AUG-1992; 92US-00936421.
PR 26-AUG-1992; 92US-00936422.
PR 26-AUG-1992; 92US-00936531.
PR 26-AUG-1992; 92US-00936532.
PR 07-DEC-1992; 92US-00987131.
PR 19-JAN-1993; 93US-00006122.
PR 19-JAN-1993; 93US-00008910.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Thompson JD, Draper KG;
XX

DR WPI; 1993-386203/48.
 XX
 PT New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
 PT with tumours or mRNA expressed from gene encoding multiple drug
 PT resistance.
 XX
 PS Claim 3; Fig 6; 69pp; English.
 XX
 CC The sequences given in AAQ51825-2266 represent areas of mRNAs which are
 CC associated with development or maintenance of chronic myelogenous
 CC leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
 CC lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
 CC leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
 CC The full length mRNAs containing these target sequences, encode aberrant
 CC cellular proteins which are able to control cellular proliferation and
 CC are directly linked to a leukemic phenotype. These target sequences are
 CC identified by the ribozyme of the invention. The ribozymes is formed in a
 CC hammerhead motif, but may also be formed in the motif of a hairpin.
 CC hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
 CC may be used to inhibit the development or expression of a transformed
 CC phenotype in man and other animals by modulating expression of the
 CC corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
 CC and transformed cells elicits inhibition of the transformed state.
 CC Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
 CC mechanism of drug resistance used by transformed cells and thus enhances
 CC drug therapies for tumours. The ribozymes may also be used to study
 CC genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
 CC correct PN field.)
 XX
 SQ Sequence 33 BP; 5 A; 16 C; 7 G; 0 T; 5 U; 0 Other;

Query Match 5.4%; Score 33; DB 1; Length 33;
 Best Local Similarity 84.8%; Pred. No. 5.5;
 Matches 28; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 134 CACCGGGCATCTTCCTCCCGAGCGCGGCACA 166
 DB 1 CACCGGGCAUCCUCCUCCCGAGCGCGGCACA 33

RESULT 3

ABX13065
 ID ABX13065 standard; DNA; 29 BP.

XX ABX13065;

DT 29-MAY-2003 (first entry)

DE Human bcl-2 PCR primer #1.

XX Human; insulin-like growth factor binding protein 5; IGFBP-5; primer; ss;
 KW Cytostatic; apoptosis; cancer; breast; prostate; ovary; lung; colon; PCR;
 KW bcl-2.

XX Homo sapiens.

PN WO2003006029-A1.

PD 23-JAN-2003.

PF 15-JUL-2002; 2002WO-AU000936.

PR 13-JUL-2001; 2001AU-00006331.

XX (UNSY) UNIV SYDNEY.

XX Baxter RC, Butt AJ;

XX WPI; 2003-221646/21.

PT Inducing apoptosis in cancer cell, useful for treating cancer, e.g.
 PT breast or prostate cancer comprises increasing the expression of insulin-

PT apoptosis-inducing amount.

XX Example; Page 28; 65pp; English.

XX The invention relates to a method for inducing apoptosis in a cancer cell
 CC comprising increasing the expression of insulin-like growth factor
 CC binding protein 5 (IGFBP-5) by the cell to an apoptosis-inducing amount.
 CC The invention also relates to a method of sensitizing a cancer cell to
 CC stimuli that induce apoptosis by increasing the expression of IGFBP-5 by
 CC the cell, a method of killing a cancer cell by sensitizing the cell to
 CC stimuli that induce apoptosis and simultaneously exposing the cell to
 CC apoptosis-inducing stimuli, or exposing the cell to apoptosis-inducing
 CC stimuli and simultaneously or subsequently increasing the expression of
 CC IGFBP-5 by the cell to an apoptosis-inducing amount. The methods are
 CC useful for treating cancer, such as breast, prostate, ovarian, lung or
 CC colon cancer, by inducing apoptosis or killing cancer cells. This
 CC sequence represents a bcl-2 PCR primer used in the method of the
 CC invention

XX Sequence 29 BP; 3 A; 3 C; 15 G; 8 T; 0 U; 0 Other;

Query Match 4.7%; Score 29; DB 1; Length 29;
 Best Local Similarity 100.0%; Pred. No. 12;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 456 GTTCGGTGGGTCATCTGTGTCGACGCG 484

DB 1 GTTCGGTGGGTCATCTGTGTCGACGCG 29

RESULT 4

AAQ51954

ID AAQ51954 standard; RNA; 28 BP.

XX AAQ51954;

XX 25-MAR-2003 (revised)

DT 26-MAY-1994 (first entry)

DE BCL-2 mRNA ribozyme cleavable nucleotide (1729).

XX Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
 KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
 KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
 KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
 KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
 KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
 KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
 KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.

XX Homo sapiens.

PN WO93233057-A1.

XX 25-NOV-1993.

PF 13-MAY-1993; 93WO-US004573.

PR 14-MAY-1992; 92US-00882822.

PR 14-MAY-1992; 92US-00882885.

PR 26-AUG-1992; 92US-00936110.

PR 26-AUG-1992; 92US-00936421.

PR 26-AUG-1992; 92US-00936422.

PR 26-AUG-1992; 92US-00936531.

PR 26-AUG-1992; 92US-00936532.

PR 07-DEC-1992; 92US-00987131.

PR 19-JAN-1993; 93US-C0006122.

PR 19-JAN-1993; 93US-C0008910.

XX (RIBO-) RIBOZYME PHARM INC.

PI Thompson JD, Draper KG;

DR WPI; 1993-386203/48.
XX
PT New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
PT with tumours or mRNA expressed from gene encoding multiple drug
PT resistance.
XX
PS Claim 3; Fig 6; 69pp; English.
XX
XX The sequences given in AAQ51825-2266 represent areas of mRNAs which are
CC associated with development or maintenance of chronic myelogenous
CC leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma or acute
CC lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
CC leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
CC The full length mRNAs containing these target sequences, encode aberrant
CC cellular proteins which are able to control cellular proliferation and
CC are directly linked to a leukemic phenotype. These target sequences are
CC identified by the ribozyme of the invention. The ribozymes is formed in a
CC hammerhead motif, but may also be formed in the motif of a hairpin.
CC hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
CC may be used to inhibit the development or expression of a transformed
CC phenotype in man and other animals by modulating expression of the
CC corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
CC and transformed cells elicits inhibition of the transformed state.
CC Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
CC mechanism of drug resistance used by transformed cells and thus enhances
CC drug therapies for tumours. The ribozymes may also be used to study
CC genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
CC correct PN field.)
XX
SQ Sequence 28 BP; 3 A; 13 C; 7 G; 5 U; 0 T; 0 A; 0 G; 0 C; 0 U; 0 Other;
Query Match 4.6%; Score 28; DB 1; Length 28;
Best Local Similarity 82.1%; Pred. No. 14;
Matches 23; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
QY 271 CCGTGGTCCACGTCGCGCCCTCGCCCAAG 298
DB 1 CCUGUGUCCACUGGCCUCCGCCCAAG 28
RESULT 5
AAL46663/C
ID AAL46663 standard; DNA; 27 BP.
XX
AC AAL46663;
XX
XX 05-AUG-2002 (first entry)
XX Human bcl-2 mRNA probe.
XX Human; bcl-2; cancer detection; disseminated cancer cell; cytostatic;
XX probe; ss.
XX Homo sapiens.
XX WO200237113-A2.
XX 10-MAY-2002.
XX 05-NOV-2001; 2001WO-EP012786.
XX 03-NOV-2000; 2000DE-01054635.
XX 03-NOV-2000; 2000US-0245854P.
XX (GIES/) GIESING M.
XX Giesing M, Grill H, Boeckmann B, Suchy B;
XX WPI; 2002-426739/45.
XX Clinically validating target from disseminated cancer cells by
PT determining whether status of target determined in cancer cells of
PT individuals correlates with cancer-related information about clinical

status of individuals.
XX
XX Example 3; Page 55; 57pp; English.
XX
XX The present invention relates to a method for the clinical validation of
CC a target from disseminated cancer cells, characterised in that for a
CC population of individuals it is determined whether a status of the target
CC determined in disseminated cancer cells of the individuals correlates
CC with at least one cancer-related information about the clinical status of
CC the individuals. The method is useful for clinically validating target
CC from disseminated cancer cells. The present sequence is a probe used to
CC demonstrate the method of the invention
XX
SQ Sequence 27 BP; 6 A; 7 C; 7 G; 7 T; 0 U; 0 Other;
Query Match 4.4%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 512 ACAACATCGCCCTGTGATGACTGACT 538
DB 27 ACAACATCGCCCTGTGATGACTGACT 1
RESULT 6
AAH45302/C
ID AAH45302 standard; DNA; 27 BP.
XX
AC AAH45302;
XX
XX 10-SEP-2001 (first entry)
XX Human Bcl-2 mutagenic primer oligo-5 for S116A substitution.
XX Human; Bcl-2; gene therapy; apoptosis inhibitor; mutant; primer; ss.
XX Homo sapiens.
XX Synthetic.
XX WO200142459-A1.
XX 14-JUN-2001.
XX 07-DEC-2000; 2000WO-JP008667.
XX 09-DEC-1999; 99JP-00350427.
XX (HISM) HISAMITSU PHARM CO LTD.
XX Shibasaki F, Kuma H;
XX WPI; 2001-381681/40.
XX New apoptosis inhibitors, useful for treating apoptosis related
XX disorders.
XX Example 1; Page 11; 43pp; Japanese.
XX The invention relates to an apoptosis inhibitor comprising the amino acid
CC sequence of Bcl-2 protein in which at least one serine residue is
CC substituted by alanine or aspartic acid. The protein has increased
CC apoptosis inhibitory activity compared with the wild type Bcl-2 protein.
CC The mutated Bcl-2 protein is useful in the treatment of disorders caused
CC by apoptosis. The present sequence was used to create a mutant Bcl-2
CC protein of the invention
XX
SQ Sequence 27 BP; 4 A; 8 C; 10 G; 5 T; 0 U; 0 Other;
Query Match 4.1%; Score 25.4; DB 1; Length 27;
Best Local Similarity 96.3%; Pred. No. 25;
Matches 26; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 334 TTGCCGAGATGTCAGCCAGCTGCAC 360

PT useful in biological assays to identify substances that block the ability
 PT of Bcl-2 to inhibit programmed cell death or apoptosis.

XX Example 1; Page 13; 36pp; English.

XX This invention relates to a novel mutant protein which is derived from a
 CC wild type human Bcl-2 protein. The mutant is created by replacing a
 CC sequence of amino acid residues comprising a flexible loop from the wild
 CC type Bcl-2 protein with an amino acid sequence comprising at least two
 CC acidic amino acids. The mutant Bcl-2 protein comprises a 166 residue
 CC shown in the specification. The invention also comprises an assay for
 CC identifying substances that bind to the Bcl-2 protein. The protein
 CC sequences of the invention are useful in biological assays to identify
 CC substances that block the ability of Bcl-2 to inhibit programmed cell
 CC death or apoptosis. The present sequence represents a PCR primer used to
 CC amplify the human Bcl2 gene and create the nucleic acid constructs used
 CC to produce the Bcl2 mutant proteins of the invention

XX Sequence 26 BP; 3 A; 8 C; 12 G; 3 T; 0 U; 0 Other;

Query Match 4.0%; Score 24.4; DB 1; Length 26;
 Best Local Similarity 96.2%; Pred. No. 30;
 Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 317 GCGGTACCGCGCGACTTCGCCGAG 342

Db 26 GCGGTACCGCGCGACTTCGCCGAG 1

RESULT 10

ABS63513

ID ABS63513 standard; DNA; 26 BP.

XX AC ABS63513;

XX 15-NOV-2002 (first entry)

DE Human Bcl2 PCR primer #7.

XX Human; PCR; primer; Bcl2; BclX1; ss; programmed cell death; apoptosis.

XX Homo sapiens.

XX WO200240530-A2.

XX 23-MAY-2002.

XX 15-NOV-2001; 2001WO-US045693.

XX 20-NOV-2000; 2000US-00716395.

XX (ABBO) ABBOTT LAB.

XX Pesik SW, Petros AM, Yoon H, Nettesheim DG;

XX WPI; 2002-490141/52.

XX New mutant Bcl-2 proteins derived from a wild type human Bcl-2 protein,

XX useful in biological assays to identify substances that block the ability

XX of Bcl-2 to inhibit programmed cell death or apoptosis.

XX Example 1; Page 13; 36pp; English.

XX This invention relates to a novel mutant protein which is derived from a

XX wild type human Bcl-2 protein. The mutant is created by replacing a

XX sequence of amino acid residues comprising a flexible loop from the wild

XX type Bcl-2 protein with an amino acid sequence comprising at least two

XX acidic amino acids. The mutant Bcl-2 protein comprises a 166 residue

XX shown in the specification. The invention also comprises an assay for

XX identifying substances that bind to the Bcl-2 protein. The protein

XX sequences of the invention are useful in biological assays to identify

XX substances that block the ability of Bcl-2 to inhibit programmed cell

XX death or apoptosis. The present sequence represents a PCR primer used to

CC amplify the human Bcl2 gene and create the nucleic acid constructs used
 CC to produce the Bcl2 mutant proteins of the invention

XX Sequence 26 BP; 3 A; 12 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 4.0%; Score 24.4; DB 1; Length 26;

Best Local Similarity 96.2%; Pred. No. 30;

Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 317 GCGGTACCGCGCGACTTCGCCGAG 342

Db 1 GCGGTACCGCGCGACTTCGCCGAG 26

RESULT 11

AAA76092

ID AAA76092 standard; DNA; 24 BP.

XX AC AAA76092;

XX 08-DEC-2000 (first entry)

DE BCL-2 PCR primer #1.

XX PCR primer; prostate cancer cell line; androgen independent; CL-1; CL-2;

XX LNCap cell line; beta-actin; prostate-specific antigen;

XX Prostate specific membrane antigen; Basic fibroblast growth factor;

XX Vascular endothelial cell growth factor; Interleukin-6;

XX Transforming Growth Factor-beta1; Transforming Growth Factor-beta2;

XX AR; PSA; IL-8; VEGF; bFGF; IL-6; TGF-beta1; TGF-beta2; TGF-beta-R;

XX EGF-R; BCL-2; E-cadherin; p53; PTEN; Caveolin; c-myc; HER-2/neu; p27;

XX Androgen receptor; ss.

XX Homo sapiens.

XX WO200004879-A1.

XX 03-AUG-2000.

XX 28-JAN-2000; 2000WO-US002223.

XX 28-JAN-1999; 99US-0117562P.

XX (REGC) UNIV CALIFORNIA.

XX Belldegrun AS, Tso C;

XX WPI; 2000-493329/44.

XX Androgen independent, aggressively tumorigenic prostate cancer cell lines

XX designated CL-1 and CL-2, useful as tools for studying the cellular and

XX molecular mechanisms of prostate cancer progression.

XX Example 2; Page 30; 90pp; English.

XX The present invention relates to androgen independent, aggressively

XX tumorigenic prostate cancer cell lines, CL-1 and CL-2, which are

XX sublines of the LNCap cell line. The present sequence is a PCR primer

XX used to amplify a coding sequence expressed by the cell lines. The coding

XX sequences which were amplified in the present invention by the primers in

XX AAA76068 to AAA76107 were: beta-actin, prostate-specific antigen (PSA),

XX Androgen receptor (AR), Prostate specific membrane antigen (PSAM),

XX Interleukin-8 (IL-8), Vascular endothelial cell growth factor (VEGF),

XX Basic fibroblast growth factor (bFGF), Interleukin-6 (IL-6), Transforming

XX Growth Factor-beta1 (TGF-beta1), Transforming Growth Factor-beta2 (TGF-

XX beta2), Transforming Growth Factor-beta-R (TGF-beta-R), Epidermal growth

XX factor receptor (EGF-R), BCL-2, E-cadherin, p53, PTEN, Caveolin, c-myc,

XX HER-2/neu and p27. RT-PCR was used to monitor changes in coding sequence

XX expression, as the LNCap parental lines progressed to the CL1 and CL2

XX sublines. The CL-1 and CL-2 sublines can be used as tools for studying

XX the cellular and molecular mechanisms of prostate cancer progression. CC

XX such as the expression patterns of various transcripts and proteins that

CC are associated with the progression of the non-metastatic, androgen-
 CC dependent state to the metastatic androgen-independent state
 XX
 SQ Sequence 24 BP; 2 A; 3 C; 10 G; 9 T; 0 U; 0 Other;

Query Match 3.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 450 CTTTGAGTTCGGTGGGTCATGTG 473
 |||||
 Db 1 CTTTGAGTTCGGTGGGTCATGTG 24

RESULT 12
 AAF82684
 ID AAF82684 standard; DNA; 24 BP.
 XX
 AC AAF82684;
 XX
 DT 18-JUN-2001 (first entry)
 XX
 DE Human BCL-2 PCR primer #1.

XX Human; androgen response element; ARE; cytostatic; gene therapy;
 KW prostate-specific chimeric enhancer; transcriptional regulation;
 KW targeted gene expression; prostate cancer; prostate disorder;
 KW prostate-specific antigen; PSA; BCL-2; PCR primer; ss.
 XX
 OS Homo sapiens.

XX WO200127256-A2.

PN 19-APR-2001.

XX 13-OCT-2000; 2000WO-US028444.

XX 14-OCT-1999; 99US-0159691P.

PR 15-OCT-1999; 99US-0159730P.

XX (REGC) UNIV CALIFORNIA SYSTEM.

XX Wu L, Carey MF, Belldgrun AS;

PI WPI; 2001-273768/28.

XX New polynucleotide, useful for treating prostatic cancer, comprises
 PT prostate specific chimeric enhancer and proximal promoter sequence
 PT operably linked to nucleic acid encoding heterologous polypeptide.

XX Example 5; Page 73; 131pp; English.

XX The present sequence was used in reverse transcriptase polymerase chain
 CC reaction (RT-PCR) analysis of human prostate cancer cells. The invention
 CC relates to an isolated polynucleotide comprising a prostate-specific
 CC chimeric enhancer (PSE) sequence and a proximal promoter sequence
 CC operably linked to a nucleic acid segment that encodes a heterologous
 CC polypeptide. The PSE contains an ARE and specifically activates
 CC transcription of the nucleic acid segment in a mammalian prostate cell.
 CC The construct is useful for the treatment of a prostate disorder or a
 CC metastasised prostate cancer, such as hyperplasia or hyperproliferation
 CC of prostate cells. It is also useful for directing the tissue-specific
 CC expression of a heterologous polypeptide in a human prostate cell. The
 CC construct may be administered by injection, infection, transfection,
 CC liposome-mediated transfection, polybrene-mediated transfection, receptor
 CC mediated uptake or Ca-PD4-mediated transfection

XX Sequence 24 BP; 2 A; 3 C; 10 G; 9 T; 0 U; 0 Other;

Query Match 3.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 450 CTTTGAGTTCGGTGGGTCATGTG 473
 |||||
 Db 1 CTTTGAGTTCGGTGGGTCATGTG 24

RESULT 13
 ABK52487/C
 ID ABK52487 standard; DNA; 24 BP.
 XX
 AC ABK52487;
 XX
 DT 14-AUG-2002 (first entry)
 XX
 DE Fluorescent probe for DNA encoding human bcl-2.

XX Human; detection of early stage allergic disease; atopic dermatitis;
 KW antiallergic; eosinocyte; eosinophil; bcl-2; probe; ss.
 XX
 OS Homo sapiens.

XX Key Location/Qualifiers
 PH modified_base 1 /tag= a
 FT /mod_base= OTHER
 FT modified_base 24 /note= "OTHER= labelled with FAM (6-carboxy-fluorescein)"
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= labelled with TAMRA (6-carboxy-N,N,N',N'-
 FT tetramethylrhodamine)"

XX JP2002119281-A.

XX 23-APR-2002.

XX 11-OCT-2000; 2000JP-00311193.

XX 11-OCT-2000; 2000JP-00311193.

XX (GENO-) GENOX SOYAKU KENKYUSHO KK.

XX (KOKU-) KOKURITSU SHONI BYOIN INCHO.

XX WPI; 2002-475327/51.

XX Detecting early stage allergic diseases with markers of 7 genes of GM-CSF
 PT R-beta, GM-CSF R-alpha, IL-3 R-alpha, PAF R, bcl-2, bcl-x and CD44 in
 PT eosinophils.

XX Example 1; Page 20; 25pp; Japanese

XX The present invention relates to a method for detecting early stage
 CC allergic diseases, particularly atopic dermatitis. The method comprises
 CC determining the expression levels of granulocyte macrophage colony
 CC stimulating factor receptor alpha or beta (GM-CSF R-alpha or -beta),
 CC interleukin 3 receptor alpha (IL-3 R-alpha), bcl-2, bcl-x, platelet
 CC activation factor receptor (PAF R) or CD44 in eosinocytes of a subject to
 CC be tested. The method further comprises comparison with expression levels
 CC in healthy volunteers. The method is useful for the early diagnosis and
 CC treatment of early stage allergic diseases such as atopic dermatitis. The
 CC present sequence represents a probe used in the methods of the present
 CC invention

XX Sequence 24 BP; 6 A; 11 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 3.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 425 TGAACCTGGGGAGGATTGTGGCT 448
 |||||
 Db 24 TGAACCTGGGGAGGATTGTGGCT 1

RESULT 14
 ABN85352/C
 ID ABN85362 standard; DNA; 24 BP.
 XX
 AC ABN85362;
 XX
 DT 07-OCT-2002 (first entry)
 XX
 DE Bcl-2 related oligonucleotide #3.
 XX
 KW Interferon; cytokine; alpha-1 interferon; beta-1 interferon; Bcl-2;
 KW gamma-1 interferon; interferon-regulated enzyme; ds-protein kinase;
 KW 2',5'-oligoadenylatesynthetase; RNAase L; Fas antigen;
 KW gamma-actin cytoskeleton protein; ss.
 XX
 OS Unidentified.
 XX
 PN RU2181773-C2.
 XX
 PD 27-APR-2002.
 XX
 PF 16-MAR-2000; 2000RU-00106253.
 XX
 PR 16-MAR-2000; 2000RU-00106253.
 XX
 PA (AMVI-). A MED VIROLOGY RES INST.
 XX
 PI Sokolova TM, Uryvaev LV;
 XX
 DR WPI; 2002-391288/42.
 XX
 PT Method of assay of human cytokine status at genetic level.
 XX
 PS Claim 1; Page 7; 10pp; Russian.
 XX
 CC The present invention relates to a method for estimating transcription
 CC levels of genes encoding interferons, interferon-dependent and
 CC proliferative cytokines. The method involves determining cytokine mRNA
 CC levels, using a combination of RT-PCR with biot- and dot-hybridisation.
 CC To illustrate the method, cytokines (alpha-1, beta-1 and gamma-1
 CC interferon), interferon-regulated enzymes (2',5'-
 CC oligoadenylatesynthetase, RNAase L and ds-protein kinase) and factors of
 CC cellular proliferation (Bcl-2, Fas antigen and gamma-actin cytoskeleton
 CC protein) were used. The present oligonucleotide was used to illustrate
 CC the invention
 XX
 SQ Sequence 24 BP; 2 A; 15 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 3.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 415 AGGACGGGGTGAAGTGGGGAGG 438
 Db 24 AGGACGGGGTGAAGTGGGGAGG 1
 RESULT 15
 ABK15648
 ID ABK15648 standard; DNA; 24 BP.
 XX
 AC ABK15648;
 XX
 DT 08-MAY-2002 (first entry)
 XX
 DE Bcl-2 RNA-DNA hybrid PCR bcl2 primer.
 XX
 KW RNA-PCR; primer; ss; cytostatic; antibacterial; bcl-2; bcl2 primer;
 KW gene therapy; mRNA-cDNA hybrid; gene function inhibition; cancer; PTGS;
 KW high throughput screening; D-RNAi; DNA-RNA interference; rdrp; antisense;
 KW RNA dependent RNA polymerase; posttranscriptional gene silencing.
 XX
 OS Homo sapiens.

XX WO200210374-A2.
 PN
 XX 07-FEB-2002.
 PD
 XX 02-AUG-2001; 2001WO-0204412.
 PF
 XX 02-AUG-2000; 2000US-0222479P.
 PR
 XX (UYSC-) UNIV SOUTHERN CALIFORNIA.
 PA
 XX Lin S, Chuong C, Widelitz RB;
 PI
 XX WPI; 2002-188740/24.
 DR
 XX Generating mRNA-cDNA hybrids for suppressing cancer-related genes, or
 PT treating or preventing microbe related genes, comprises thermocycling
 PT steps of promoter-linked double-stranded cDNA or RNA synthesis.
 XX
 PS Example 9; Page 33; 53pp; English.
 XX
 CC The invention relates to generating mRNA-cDNA hybrids, comprising (a)
 CC providing a solution containing a nucleic acid template, one or more
 CC primers complementary to the sense conformation of the nucleic acid
 CC template, and one or more promoter-linked primers complementary to the
 CC antisense conformation of the nucleic acid template, and with an RNA
 CC promoter, (b) treating the nucleic acid template with the one of more
 CC primers to synthesise a first cDNA strand, (c) treating the first cDNA
 CC strand with one or more promoter-linked primers to synthesise a promoter-
 CC linked double-stranded nucleic acid, (d) treating the promoter-linked
 CC double-stranded nucleic acid to synthesise amplified mRNA fragments and
 CC (e) treating the mRNA fragments with one or more primers to synthesise
 CC mRNA-cDNA hybrids by reverse transcription of the amplified mRNA
 CC fragments. The method is useful for preparing high amounts of pure and
 CC specific mRNA-cDNA hybrids for transducing biological effects of interest
 CC in vitro as well as in vivo, for inhibiting gene function in prokaryotes
 CC and eukaryotes in vivo and in vitro, for suppressing cancer-related
 CC genes, in treating or preventing microbe related genes, in studying
 CC candidate molecular pathways with systematic knock out of involved
 CC molecules, in high throughput screening of gene functions based on
 CC microarray analysis, and as a tool in studying gene function in
 CC physiological conditions. The mRNA-cDNA hybrids may be used to screen for
 CC special gene functions, for manipulating gene expression in vitro, and
 CC for designing therapy for genetic diseases in vivo. The cDNA part of a D-
 CC RNAi (DNA-RNA interference) can be modified by nucleotide analogue
 CC incorporation to increase the stability and effectiveness of transfected
 CC probe activities. The RdRp (RNA dependent RNA polymerase) enzyme may
 CC provide higher affinity of the mRNA template of a D-RNAi compared to ds-
 CC RNA due to lower binding interaction between DNA-RNA duplexes than RNA-
 CC RNA duplexes. The cDNA part of a D-RNAi provides further antisense gene
 CC knockout activity in addition to the posttranscriptional gene silencing
 CC (PTGS) mechanisms of the sense-RNA template, resulting in multiple
 CC specific gene interference effects with one probe. The present sequence
 CC is a PCR primer used to make a bcl-2 RNA-DNA hybrid in an experiment to
 CC demonstrate the method of the invention
 XX
 SQ Sequence 24 BP; 6 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 3.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 527 GGATGACTGAGTACCTGAACCGGC 550
 Db 1 GGATGACTGAGTACCTGAACCGGC 24
 RESULT 16
 AAQ51950
 ID AAQ51950 standard; RNA; 23 BP.
 XX
 AC AAQ51950;
 XX

DT 25-MAR-2003 (revised)
 XX 26-MAY-1994 (first entry)
 DE BCL-2 mRNA ribozyme cleavable nucleotide (1522).
 XX
 KW Multiple drug resistance; mar-1; ribozyme; membrane protein; liver;
 KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
 KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
 KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
 KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
 KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
 KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
 KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9323057-A1.
 XX
 XX 25-NOV-1993.
 PD
 XX 13-MAY-1993; 93WO-US004573.
 XX
 PR 14-MAY-1992; 92US-00882822.
 PR 14-MAY-1992; 92US-00882885.
 PR 26-AUG-1992; 92US-00936110.
 PR 26-AUG-1992; 92US-00936421.
 PR 26-AUG-1992; 92US-00936422.
 PR 26-AUG-1992; 92US-00936531.
 PR 26-AUG-1992; 92US-00936532.
 PR 07-DEC-1992; 92US-00987131.
 PR 19-JAN-1993; 93US-00006122.
 PR 19-JAN-1993; 93US-00008910.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Thompson JD, Draper KG;
 XX
 XX WPI; 1993-386203/48.
 DR
 XX New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
 PT with tumors or mRNA expressed from gene encoding multiple drug
 PT resistance.
 XX
 XX Claim 3; Fig 6; 69pp; English.
 PS
 XX The sequences given in AAQ51825-2266 represent areas of mRNAs which are
 CC associated with development or maintenance of chronic myelogenous
 CC leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
 CC lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
 CC leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
 CC The full length mRNAs containing these target sequences, encode aberrant
 CC cellular proteins which are able to control cellular proliferation and
 CC are directly linked to a leukemic phenotype. These target sequences are
 CC identified by the ribozyme of the invention. The ribozymes is formed in a
 CC hammerhead motif, but may also be formed in the motif of a hairpin.
 CC hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
 CC may be used to inhibit the development or expression of a transformed
 CC phenotype in man and other animals by modulating expression of the
 CC corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
 CC and transformed cells elicits inhibition of the transformed state.
 CC Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
 CC mechanism of drug resistance used by transformed cells and thus enhances
 CC drug therapies for tumors. The ribozymes may also be used to study
 CC genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
 CC correct FN field.)
 XX
 SQ Sequence 23 BP; 6 A; 5 C; 9 G; 0 T; 3 U; 0 Other;
 Query Match 3.7%; Score 23; DB 1; Length 23;
 Best Local Similarity 87.0%; Pred. No. 35;
 Matches 20; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
 QY 64 AAGCTGTCCGAGAGGGGCTACGA 86

Db 1 AAGCUGCGCAGAGGGGCUACGA 23
 RESULT 17
 AAA26255/C
 ID AAA26255 standard; DNA; 23 BP.
 XX
 AC AAA26255;
 XX
 DT 19-JUL-2000 (first entry)
 XX
 DE Bcl-2 antisense oligonucleotide sequence SEQ ID NO:2753.
 XX
 KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW gene expression modification; cancer; phosphorothioate; endonuclease;
 KW anticancer; breast cancer; endometrium cancer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO9954459-A2.
 EN
 XX 28-OCT-1999.
 PD
 XX 19-APR-1999; 99WO-US008547.
 PF
 XX 20-APR-1998; 98US-0082404P.
 PR 23-JUN-1998; 98US-00103636.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
 PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeblerli P;
 PI Matulic-Adamic J;
 XX
 XX WPI; 2000-013248/01.
 DR
 XX New nucleic acids that interact, and optionally cleave, target sequences,
 PT used to treat cancer.
 PT
 XX Example 9; Page 106; 148pp; English.
 PS
 XX The present invention describes nucleic acids (A) that interact stably
 CC with a target sequence and contain at least one phosphorodithioate
 CC link, having endonuclease activity. (A), and more generally any catalytic
 CC nucleic acid (A') that modulates expression of the oestrogen receptor
 CC gene, are used to treat cancer (particularly of breast or endometrium),
 CC in vivo or by transforming cells ex vivo and implanting treated cells, or
 CC for other conditions associated with levels of oestrogen receptor.
 CC Because of the high selectivity for targeted RNA, (A) can also be used to
 CC correlate inhibition of gene expression with alterations in phenotype,
 CC particularly for identification of therapeutic targets, and as research
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA24748 to AAA25992 represent their corresponding target sequences.
 CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 23 BP; 9 A; 9 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 3.7%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 35;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 443 TGGCCTTCTTTCAGTTCGGTGGG 465
 Db 23 TGGCCTTCTTTCAGTTCGGTGGG 1

```

RESULT 18
AA26253/c
ID   AAA26253 standard; DNA; 23 BP.
XX
AC   AAA26253;
XX
DT   19-JUL-2000 (first entry)
XX
DE   Bcl-2 antisense oligonucleotide sequence SEQ ID NO:2751.
XX
KW   Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW   hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW   gene expression modification; cancer; phosphorothioate; endonuclease;
KW   anticancer; breast cancer; endometrium cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954459-A2.
XX
PD   28-OCT-1999.
XX
PF   19-APR-1999; 99WO-US008547.
XX
PR   20-APR-1998; 98US-0082404P.
XX
PS   23-JUN-1998; 98US-00103636.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
PI   Reynolds M, Zwick M, Jarvis T, Woolf T, Haeblerli P;
PI   Matulic-Adamic J;
XX
DR   WPI; 2000-013248/01.
XX
PT   New nucleic acids that interact, and optionally cleave, target sequences,
PT   used to treat cancer.
XX
PS   Example 9; Page 106; 148pp; English.
XX
CC   The present invention describes nucleic acids (A) that interact stably
CC   with a target sequence and contain at least one phosphorodithioate
CC   link having endonuclease activity (A), and more generally any catalytic
CC   nucleic acid (A) that modulates expression of the oestrogen receptor
CC   gene, are used to treat cancer (particularly of breast or endometrium),
CC   in vivo or by transforming cells ex vivo and implanting treated cells, or
CC   for other conditions associated with levels of oestrogen receptor.
CC   Because of the high selectivity for targeted RNA, (A) can also be used to
CC   correlate inhibition of gene expression with alterations in phenotype,
CC   particularly for identification of therapeutic targets, and as research
CC   reagents (for RNA, in the same way that restriction endonucleases are
CC   used with DNA). The combination of modifications in (A) improves
CC   resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC   AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC   AAA24748 to AAA25992 represent their corresponding target sequences.
CC   AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC   sequences, and AAA26107 to AAA26218 represent their corresponding target
CC   sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC   antisense oligonucleotides used in the exemplification of the present
CC   invention
XX
SQ   Sequence 23 BP; 9 A; 9 C; 4 G; 1 T; 0 U; 0 Other;
      Query Match      3.7%; Score 23; DB 1; Length 23;
      Best Local Similarity 100.0%; Pred. No. 35;
      Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY   443 TGGCCTCTTTGAGTTCGTGGG 465
      |||||
DB   23 TGGCCTCTTTGAGTTCGTGGG 1

```

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RESULT 19
AAT36054/c
ID   AAT36054 standard; DNA; 24 BP.
XX
AC   AAT36054;
XX
DT   20-NOV-1996 (first entry)
XX
DE   bcl-2 reverse PCR primer.
XX
KW   Cardiovascular disease; differential expression; target gene;
KW   pathway gene; fingerprint gene; atherosclerosis; ischaemia; reperfusion;
KW   hypertension; restenosis; arterial inflammation; vector; antibody;
KW   diagnosis; gene therapy; drug screening; bcl-2;
KW   polymerase chain reaction; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9624604-A1.
XX
PD   15-AUG-1996.
XX
PF   09-FEB-1996; 96WO-US001883.
XX
PR   10-FEB-1995; 95US-00386844.
XX
PS   07-JUN-1995; 95US-00485573.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Falb DA;
XX
DR   WPI; 1996-384391/38.
XX
PT   New genes differentially expressed in cardiovascular disease - and
PT   related vectors, host cells, proteins and antibodies, for diagnosis,
PT   monitoring, treatment and drug screening.
XX
PS   Example 7; Page 12; 200pp; English.
XX
CC   Monocyte RNA from apolipoprotein E (apoE)-deficient and control mice was
CC   compared using primers for mouse bcl-2 (AAT36053 and AAT36054) and gamma-
CC   actin (AAT36055 and AAT36056). bcl-2 mRNA levels were significantly lower
CC   in the apoE-deficient mice (an animal model of atherosclerosis).
CC   Regulation of the mouse bcl-2 gene appeared to be regulated by serum
CC   cholesterol levels. Similar results were obtained with the human bcl-2 and
CC   glucutheone peroxidase genes (see also AAT36057-58). The discovery that
CC   certain genes (see also AAT26029-36) are differentially expressed in
CC   cardiovascular diseases can be used to develop methods for the diagnosis
CC   and treatment of such diseases
XX
SQ   Sequence 24 BP; 4 A; 14 C; 1 G; 5 T; 0 U; 0 Other;
      Query Match      3.6%; Score 22.4; DB 1; Length 24;
      Best Local Similarity 95.8%; Pred. No. 43;
      Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY   417 GGACGGGTGAACCTGGGGAGGAT 440
      |||||
DB   24 GGATGGGTGAACCTGGGGAGGAT 1

```

```

RESULT 20
AAV81830/c
ID   AAV81830 standard; DNA; 24 BP.
XX
AC   AAV81830;
XX
DT   11-MAR-1999 (first entry)
XX
DE   Mouse bcl-2 reverse primer #1.
XX
KW   human; cardiovascular disease; atherosclerosis; ischaemia; restenosis;
KW   reperfusion; hypertension; arterial inflammation; diagnosis; rchds28;

```

```

KW primer; ss.
XX
XX Synthetic.
OS Mus sp.
XX
XX US5849578-A.
XX
XX 15-DEC-1998.
XX
XX 15-MAR-1996; 96US-00616844.
XX
XX 10-FEB-1995; 95US-00386844.
XX
XX 07-JUN-1995; 95US-00458873.
XX
XX 09-FEB-1996; 96US-00599654.
XX
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Falb DA;
XX
XX WPI; 1999-069743/06.
XX
XX DNA encoding rchd528 polypeptide - associated with cardiovascular
XX disease.
XX
XX Example; Col 95; 122pp; English.
XX
XX The present invention describes rchd528 protein. A method has been
XX developed for producing the rchd528 gene product. The present invention
XX also describes methods and compositions for the treatment and diagnosis
XX of cardiovascular diseases, including: atherosclerosis; ischaemia;
XX restenosis; reperfusion; hypertension; and arterial inflammation. The
XX present sequence represents a primer used in an example from the present
XX invention
XX
XX Sequence 24 BP; 4 A; 14 C; 1 G; 5 T; 0 U; 0 Other;
SQ
Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 43;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GGACGGGGTGAAGTGGGGGAGGAT 440
DB 24 GGATGGGGTGAAGTGGGGGAGGAT 1

RESULT 21
AAAX26250/c
AXX26250 standard; DNA; 24 BP.
XX
XX AAX26250;
XX
XX 24-MAY-1999 (first entry)
XX
XX Reverse primer for RT-PCR analysis of mouse bcl-2 mRNA.
XX
XX Fingerprinting gene; rchd502; transmembrane protein; cardiovascular;
XX fingerprint/target gene; up-regulated; endothelial cell; shear-stress;
XX atherosclerosis; ischemia; reperfusion; hypertension; restenosis; human;
XX RT-PCR; primer; bcl-2; mouse; ss.
XX
XX Synthetic.
XX OS
XX Mus sp.
XX
XX US5882925-A.
XX
XX 16-MAR-1999.
XX
XX 09-FEB-1996; 96US-00599654.
XX
XX 10-FEB-1995; 95US-00386844.
XX
XX 07-JUN-1995; 95US-00485573.
XX
XX (MILL-) MILLENNIUM PHARM INC.
PA

KW primer; ss.
XX
XX Synthetic.
OS Mus sp.
XX
XX US5849578-A.
XX
XX 15-DEC-1998.
XX
XX 15-MAR-1996; 96US-00616844.
XX
XX 10-FEB-1995; 95US-00386844.
XX
XX 07-JUN-1995; 95US-00458873.
XX
XX 09-FEB-1996; 96US-00599654.
XX
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Falb DA;
XX
XX WPI; 1999-069743/06.
XX
XX DNA encoding rchd528 polypeptide - associated with cardiovascular
XX disease.
XX
XX Example; Col 95; 122pp; English.
XX
XX The present invention describes rchd528 protein. A method has been
XX developed for producing the rchd528 gene product. The present invention
XX also describes methods and compositions for the treatment and diagnosis
XX of cardiovascular diseases, including: atherosclerosis; ischaemia;
XX restenosis; reperfusion; hypertension; and arterial inflammation. The
XX present sequence represents a primer used in an example from the present
XX invention
XX
XX Sequence 24 BP; 4 A; 14 C; 1 G; 5 T; 0 U; 0 Other;
SQ
Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 43;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GGACGGGGTGAAGTGGGGGAGGAT 440
DB 24 GGATGGGGTGAAGTGGGGGAGGAT 1

RESULT 22
AAAX8587/c
ID AA85887 standard; DNA; 24 BP.
XX
XX AAA85887;
XX
XX 05-FEB-2001 (first entry)
XX
XX PCR primer for mouse bcl-2 gene.
XX
XX Mouse; bcl-2 gene; differential expression; atherosclerosis;
XX cardiovascular disease; diagnosis; therapy; PCR primer; ss.
XX
XX Mus sp.
XX
XX US6124433-A.
XX
XX 26-SEP-2000.
XX
XX 06-OCT-1997; 97US-00944496.
XX
XX 10-FEB-1995; 95US-00386844.
XX
XX 07-JUN-1995; 95US-00485573.
XX
XX 09-FEB-1996; 96US-00599654.
XX
XX (BGRM) BRIGHAM & WOMENS HOSPITAL.
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Gimbrone MA, Falb DA;
XX
XX WPI; 2000-611017/58.
XX
XX Novel isolated rchd502 polypeptides, differentially expressed in response
XX to endothelial cell shear stress, used for diagnosis, monitoring clinical
XX

```


PT trails, and treating cardiovascular diseases such as ischemia.

XX Example 7; Col 9; 123pp; English.

XX This oligonucleotide is a reverse PCR primer for the mouse bcl-2 gene. It
 CC was used with the forward primer given in AAA88586 in a quantitative RT-
 CC PCR analysis of mouse bcl-2 mRNA levels in apoe-deficient mice, a murine
 CC model of atherosclerosis. bcl-2 mRNAs were shown to be lower in apoe-
 CC deficient mice relative to wild-type controls. The invention provides
 CC novel human genes (see AAA8576-83) that are differentially expressed in
 CC cardiovascular disease states, and which are of diagnostic and
 CC therapeutic use

XX Sequence 24 BP; 4 A; 14 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 3.6%; Score 22.4; DB 1; Length 24;

Best Local Similarity 95.8%; Pred. No. 43;

Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GGACGGGGTGAACCTGGGGGAGGAT 440

DB 24 GGATGGGGTGAACCTGGGGGAGGAT 1

RESULT 23

AAZ89800/c

ID AAZ89800 standard; cDNA; 24 BP.

XX AAZ89800;

XX 05-MAY-2000 (first entry)

XX Reverse primer for mouse bcl2 amplification.

XX Differentially expressed; cardiovascular disease; atherosclerosis;
 KW ischaemia; reperfusion; hypertension; restenosis; arterial inflammation;
 KW bcl2; differential display analysis; ss.

XX Mus sp.

XX US6020463-A.

XX 01-FEB-2000.

XX 06-OCT-1997; 97US-00944423.

XX 10-FEB-1995; 95US-00386844.

XX 07-JUN-1995; 95US-00485573.

XX 09-FEB-1996; 96US-00599654.

XX (BGM) BRIGHAM & WOMENS HOSPITAL.

XX (MILL-) MILLENIUM PHARM INC.

XX Gimbrone MA, Falb DA;

XX WPI; 2000-146911/13.

XX Marker proteins for the diagnosis of cardiovascular diseases such as
 PT atherosclerosis and hypertension, comprising peptide sequences derived
 PT from the rchd523 transmembrane protein.

XX Disclosure; Col 9; 121pp; English.

XX This sequence represents a PCR primer used to amplify the mouse bcl2
 CC nucleotide sequence. The primer is used in methods for the identification
 CC of the marker proteins and differentially expressed genes of the
 CC invention. The invention relates to the rchd523 transmembrane polypeptide
 CC (see AAY78505) encoded by cDNA contained in the plasmid pfchd523. The
 CC rchd523 protein is differentially expressed in diseased cells compared to
 CC healthy cells. The rchd523 protein may be used as a marker protein for
 CC the diagnosis of cardiovascular diseases including atherosclerosis,
 CC ischaemia, reperfusion, hypertension, restenosis and arterial
 CC inflammation. rchd523 peptides may be used as antigens in the production

CC of antibodies specific for rchd523. The anti-rchd523 antibodies may then
 CC be used in diagnostic assays to quantitate rchd523 peptides in samples

XX Sequence 24 BP; 4 A; 14 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 3.6%; Score 22.4; DB 1; Length 24;

Best Local Similarity 95.8%; Pred. No. 43;

Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GGACGGGGTGAACCTGGGGGAGGAT 440

DB 24 GGATGGGGTGAACCTGGGGGAGGAT 1

RESULT 24

AAZ88011/c

ID AAZ88011 standard; DNA; 24 BP.

XX AAZ88011;

XX 19-APR-2000 (first entry)

XX Mouse bcl-2 reverse PCR primer SEQ ID NO:11.

XX Cardiovascular disease; diagnosis; atherosclerosis; ischaemia;
 KW reperfusion; hypertension; restenosis; arterial inflammation;
 KW antiarteriosclerotic; vasotropic; hypotensive; PCR primer; ss.

XX Mus sp.

XX US6018025-A.

XX 25-JAN-2000.

XX 06-OCT-1997; 97US-00944868.

XX 10-FEB-1995; 95US-00386844.

XX 07-JUN-1995; 95US-00485573.

XX 09-FEB-1996; 96US-00599654.

XX (MILL-) MILLENIUM PHARM INC.

XX (BGM) BRIGHAM & WOMENS HOSPITAL.

XX Falb DA, Gimbrone MA;

XX WPI; 2000-136704/12.

XX Isolated polypeptide for treating and diagnosing cardiovascular disease,
 PT such as, atherosclerosis, ischemia/reperfusion, hypertension, restenosis
 PT and arterial inflammation.

XX Example; Col 9; 122pp; English.

XX The present invention describes an isolated polypeptide (I) comprising
 CC either the amino acid sequence of 1481 residues, given in AAY68447, or an
 CC amino acid sequence encoded by the cDNA contained in plasmids pFCHD528A
 CC (ATCC 69985), pFCHD528B (ATCC 69986) and pFCHD528C (ATCC 69987). The
 CC polypeptide is useful in the treatment and diagnosis of cardiovascular
 CC disease, such as, atherosclerosis, ischaemia/reperfusion, hypertension,
 CC restenosis and arterial inflammation. AAZ88001 to AAZ88040, and AAY68444
 CC to AAY68457 represent sequences used in the exemplification of the
 CC present invention

XX Sequence 24 BP; 4 A; 14 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 3.6%; Score 22.4; DB 1; Length 24;

Best Local Similarity 95.8%; Pred. No. 43;

Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GGACGGGGTGAACCTGGGGGAGGAT 440

DB 24 GGATGGGGTGAACCTGGGGGAGGAT 1

RESULT 25
AAQ51952
ID AAQ51952 standard; RNA; 22 BP.
XX
AC AAQ51952;
XX
DT 25-MAR-2003 (revised)
DT 26-MAY-1994 (first entry)
XX
DE BCL-2 mRNA ribozyme cleavable nucleotide (1656).
XX
KW Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
KW hairpin; hepatitis delta virus; group I intron; RNasep; ss.
XX
OS Homo sapiens.
XX
XX WO9323057-A1.
XX
XX 25-NOV-1993.
XX
XX 13-MAY-1993; 93WO-US004573.
XX
XX 14-MAY-1992; 92US-00882822.
XX 14-MAY-1992; 92US-00882885.
XX 26-AUG-1992; 92US-00936110.
XX 26-AUG-1992; 92US-00936421.
XX 26-AUG-1992; 92US-00936422.
XX 26-AUG-1992; 92US-00936531.
XX 26-AUG-1992; 92US-00936532.
XX 07-DEC-1992; 92US-00987131.
XX 19-JAN-1993; 93US-00006122.
XX 19-JAN-1993; 93US-00008910.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Thompson JD, Draper KG;
XX
XX WPI; 1993-386203/48.
XX
XX New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
XX with tumours or mRNA expressed from gene encoding multiple drug
XX resistance.
XX
XX Claim 3; Fig 6; 69pp; English.
XX
XX The sequences given in AAQ51825-2266 represent areas of mRNAs which are
XX associated with development or maintenance of chronic myelogenous
XX leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
XX lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
XX leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
XX The full length mRNAs containing these target sequences, encode aberrant
XX cellular proteins which are able to control cellular proliferation and
XX are directly linked to a leukemic phenotype. These target sequences are
XX identified by the ribozyme of the invention. The ribozymes is formed in a
XX hammerhead motif, but may also be formed in the motif of a hairpin.
XX hepatitis delta virus, group I intron or RNasep-like RNA. These ribozymes
XX may be used to inhibit the development or expression of a transformed
XX phenotype in man and other animals by modulating expression of the
XX corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
XX and transformed cells elicits inhibition of the transformed state.
XX Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
XX mechanism of drug resistance used by transformed cells and thus enhances
XX drug therapies for tumours. The ribozymes may also be used to study
XX genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
XX correct PN field.)
XX

SQ Sequence 22 BP; 3 A; 10 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 42;
Matches 20; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 198 CGCCAGGACCTGCGCGTGCAG 213
|||||:|||||:|||||
DB 1 CGCCAGGACCTGCGCGTGCAG 22
RESULT 26
AAC65038
ID AAC65038 standard; DNA; 22 BP.
XX
AC AAC65038;
XX
DT 12-FEB-2001 (first entry)
XX
DE Bcl2 RNA RT-PCR primer SEQ ID NO: 21.
XX
KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
KW protein kinase C; PKC; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200061810-A1.
XX
XX 19-OCT-2000.
XX
XX 07-APR-2000; 2000WO-US009293.
XX
XX 08-APR-1999; 99US-0128377P.
XX
XX (OASI-) OASIS BIOSCIENCES INC.
XX
XX Brown BD, Riley TA;
XX
XX WPI; 2000-679502/66.
XX
XX Antisense oligonucleotides containing degenerate and/or universal bases,
XX and modified backbone linkages is useful to target therapeutic genes,
XX preferably anti-apoptosis or chemoresistance genes.
XX
XX Example 4; Page 11; 32pp; English.
XX
XX The present invention is concerned with antisense oligonucleotides
XX containing a number of degenerate bases and with a modified backbone
XX which can be used to direct cleavage of target RNA molecules. The use of
XX degenerate bases reduces the risk of immune activation following
XX injection into animals, which causes deleterious side effects associated
XX with many therapeutic antisense oligonucleotides. Sequences AAC65029-
XX C65077 are antisense oligonucleotides and PCR primers used in assays to
XX demonstrate the effects of the sequences of the invention
XX
XX Sequence 22 BP; 2 A; 8 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 42;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 264 GGTGCCACCTGTGTCCACCTG 285
|||||:|||||:|||||
DB 1 GGTGCCACCTGTGTCCACCTG 22
RESULT 27
ABN85360
ID ABN85360 standard; DNA; 21 BP.
XX
AC ABN85360;
XX
XX 07-OCT-2002 (first entry)
XX

16-MAR-2000; 2000RU-00106253.
(AMVI=) A MED VIROLOGY RES INST.
Sokolova TW, Uryvaev LV;
WPI; 2002-391288/42.
Method of assay of human cytokine status at genetic level.
Claim 1; Page 7; 10pp; Russian.
The present invention relates to a method for estimating transcription levels of genes encoding interferons, interferon-dependent and proliferative cytokines. The method involves determining cytokine mRNA levels, using a combination of RT-PCR with blot- and dot-hybridisation. To illustrate the method, cytokines (alpha-1, beta-1 and gamma-1 interferon), interferon-regulated enzymes (2',5'-oligoadenylatesynthetase, RNasease L and ds-protein kinase) and factors of cellular proliferation (Bcl-2, Fas antigen and gamma-actin cytoskeleton protein) were used. The present oligonucleotide was used to illustrate the invention
Sequence 21 BP; 2 A; 5 C; 9 G; 5 T; 0 U; 0 Other;
Query Match 3.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 49;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 544 AACCGGCACCTGCACACCTGG 564
|||
DB 21 AACCGGCACCTGCACACCTGG 1
|||
RESULT 29
AAT33695
ID AAT33695 standard; DNA; 20 BP.
XX AC
XX AAT33695;
DT 04-JUN-1997 (first entry)
XX XX
DE Human BCL2 cDNA sense PCR primer.
XX XX
KW Sense oriented; genetic suppressor element; GSE; reverse; BCL2; gene; mediated; suppression; apoptosis; mammalian; cell; inhibition;
KW sensitisation; cancer; chemotherapeutic agent; increase; treatment;
KW induction; virus; infection; death; disease; haematopoietic;
KW neurological; recombinant construct; decrease; expression; anticancer;
KW non-Hodgkin's lymphoma; B cell malignancy; polymerase chain reaction;
KW primer; PCR; ss.
XX XX
OS Synthetic.
XX XX
DN WO9629403-A1.
XX XX
PD 26-SEP-1996.
XX XX
PF 14-MAR-1996; 96WO-US003545.
XX XX
PR 17-MAR-1995; 95US-00405702.
XX XX
PA (UNII) UNIV ILLINOIS FOUND.
XX XX
PI Tarasewicz DG, Schott B, Holzmayer TA, Roninson IB;
XX WPI; 1996-443179/44.
DR XX
XX Sense oriented genetic suppressor element - for reversing BCL2 mediated inhibition of apoptosis, and for sensitising cancer cells against chemotherapeutic agents.
XX XX
PS Example 2; Page 26; 66pp; English.

XX CC The primer pair AAT33695/96 was used for the PCR amplification of human
 CC BCL2 cDNA, which encodes a protein from which a peptide capable of
 CC inhibiting BCL2 gene, or gene product, function in a cell can be derived.
 CC The cDNA sequence encoding the peptide is a sense oriented genetic
 CC suppressor element (GSE) for reversing BCL2 mediated suppression of
 CC apoptosis in a mammalian cell. The GSE and its peptide product can be
 CC used to sensitize cancer cells to chemotherapeutic agents, and to
 CC increase apoptosis, especially for the treatment of cancer, but more
 CC generally to induce virus infected cell death, or to treat apoptosis
 CC related diseases of hematopoietic or neurological cells. The GSE peptide
 CC product or a recombinant construct encoding the GSE can be used to
 CC decrease BCL2 gene expression by exerting an anticancer effect, e.g. in
 CC cases of non-Hodgkin's lymphoma and B cell malignancy
 XX SQ Sequence 20 BP; 1 A; 4 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 442 GTGGCCTCTTTGAGTTCCG 451
 Db 1 GTGGCCTCTTTGAGTTCCG 20

RESULT 30
 AAV19653/C
 ID AAV19653 standard; DNA; 20 BP.
 XX AC AAV19653;
 XX 25-MAR-2003 (revised)
 DT 12-JUN-1998 (first entry)
 XX Human bcl-2 antisense oligonucleotide 2.
 XX Antisense oligonucleotide; bcl-2 gene; lymphoma; leukaemia; human;
 KW cancer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX US5734033-A.
 PN 31-MAR-1998.
 XX 24-MAR-1994; 94US-00217082.
 XX 22-DEC-1988; 88US-00288692.
 PR 21-FEB-1992; 92US-00840716.
 XX (UYPE-) UNIV PENNSYLVANIA.
 XX Reed J;
 XX WPI; 1998-229881/20.
 XX Anti-sense oligo:nucleotide(s) complementary to BCL-2 mRNA - useful for
 PT treating cancers, e.g. lymphoma(s) and some leukaemia(s).
 XX Claim 6; Col 3-4; 21pp; English.

XX This antisense oligonucleotide is complementary to the splice donor site
 CC of the human bcl-2 mRNA. The Bcl-2 antisense oligonucleotides are
 CC phosphorothioate derivatives and can straddle strategic sites such as the
 CC translation initiation site, donor and acceptor splicing sites, or sites
 CC for transportation or degradation. Blocking translation at such strategic
 CC sites prevents the formation of a functional bcl-2 gene product. These
 CC oligonucleotides may be used for treating cancers associated with high
 CC levels of bcl-2 gene expression, especially lymphomas and some
 CC leukaemias. (Updated on 25-MAR-2003 to correct PF field.)

SQ Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 577 GGAGGCTGGGTAGTGCATC 596
 Db 20 GGAGGCTGGGTAGTGCATC 1
 RESULT 31
 AAV84100/C
 ID AAV84100 standard; DNA; 20 BP.
 XX AC AAV84100;
 XX 20-MAR-2003 (revised)
 DT 11-MAR-1999 (first entry)
 XX Antisense oligonucleotide directed against human Bcl-2 RNA.
 XX Antisense oligonucleotide; human Bcl-2 RNA; hyperproliferative disease;
 KW restenosis; fibrosis; psoriasis; tumour; cancer cell;
 KW apoptosis induction; tumour multi-drug resistance reversion; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO9856905-A1.
 PN 17-DEC-1998.
 XX 05-JUN-1998; 98WO-EP003362.
 XX 09-JUN-1997; 97GB-00011919.
 XX (NOVS) NOVARTIS AG.
 PA (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH.
 XX Ziegler A, Zangemeister-Wittke U, Fabbro D, Altmann K;
 XX WPI; 1999-060323/05.
 XX New antisense oligonucleotides for treating hyperproliferative diseases -
 PT comprising a sequence complementary to base positions 1880 to 1899 or the
 PT translation termination codon region of the Bcl-2 gene.
 XX Claim 10; Page 33; 43pp; English.
 XX The present sequence represents an antisense oligonucleotide that is
 CC directed against nucleotides 1890 to 1899 of a RNA deriving from the gene
 CC encoding human Bcl-2 protein. The antisense oligonucleotide can be used
 CC for inhibiting the expression of human Bcl-2 in the treatment of
 CC hyperproliferative diseases such as restenosis, fibrosis, psoriasis or
 CC tumours. In particular the antisense oligonucleotide is capable of
 CC killing cancer cells by induction of apoptosis or reverting multi-drug
 CC resistance of tumours. The oligonucleotide can also be used as diagnostic
 CC agent. (Updated on 20-MAR-2003 to correct PA field.)
 XX SQ Sequence 20 BP; 4 A; 11 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 422 GGGTGAACCTGGGGAGGATT 441
 Db 20 GGGTGAACCTGGGGAGGATT 1

RESULT 32
 AAX27537
 441

```

ID AAX27537 standard; RNA; 20 BP.
XX
AC AAX27537;
XX
DT 27-MAY-1999 (first entry)
XX
DE Synthetic RNA sequence produced by the method of the invention.
XX
XX Silyloxymethyl; phosphonate; silyloxymethyl halide; diagnosis; ss;
KW cyanoethyl phosphoramidate coupling; isomerisation; steric hindrance.
XX
OS Synthetic.
XX
XX WO9909044-A1.
PN
XX PD 25-FEB-1999.
XX
XX PF 17-AUG-1998; 98WO-EF005215.
XX
XX PR 18-AUG-1997; 97CH-00001931.
XX
PA (PITS/) PITSCH S.
PA (WEIS/) WEISS P A.
PA (JENN/) JENNY L.
XX
PI Pitsch S, Weiss PA, Jenny L;
XX
XX WPI; 1999-180963/15.
XX
XX 2-Silyloxymethyl ribonucleosides and their phosphonate derivatives - have
PT high purity, use in machine synthesis of RNA-oligonucleotides, enable longer
PT oligonucleotide chain construction, and larger amounts.
XX
XX Example 7; Page 26; 38pp; English.
XX
XX The invention relates to silyloxymethyl protected D- or L-ribonucleosides
CC and their phosphonates (I), and silyloxymethyl halides (II). (I) are
CC intermediates for synthesis of RNA-oligonucleotides with predetermined
CC nucleotide sequence, particularly by machine synthesis. The groups
CC specified above, apart from those on silyl, are those particularly for
CC the cyanoethyl phosphoramidate coupling. Uses of the oligoribonucleotide
CC products in diagnosis, therapy, and as research tools, are well known,
CC and are not dealt with in detail. (II) is an intermediate for (I). The
CC silyloxymethyl halide reagent is easy to prepare, and yields are high.
CC Introduction of the silyloxymethyl group into the ribonucleoside is
CC simple and rapid, and the acetal bond formed does not migrate,
CC eliminating particularly the prior art problem of 2' to 3' isomerisation.
CC The methylenedioxy group spacer between the silyl group and nucleoside
CC ring results in less steric hindrance than bulky direct silyloxy
CC linkages, enabling first, a range of choices for the silyl substituents,
CC to provide, e.g., acid or base stability; and second, higher yields in
CC coupling. Purer products are therefore obtained than in prior art,
CC enabling larger quantities and longer chains of oligoribonucleotides to
CC be synthesised successfully, and in shorter times
XX
XX Sequence 20 BP; 4 A; 1 C; 11 G; 0 T; 4 U; 0 Other;
SQ
Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 58;
Matches 16; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 422 GGGTCACTGGGGGAGGATT 441
DB 1 GGGUGAACUGGGGAGGAUU 20

RESULT 33
AAZ37380
ID AAZ37380 standard; DNA; 20 BP.
XX
AC AAZ37380;
XX
DT 04-FEB-2000 (first entry)
XX
XX PCR primer for human Bcl-2 gene.
XX
XX Bcl-2; human; PCR primer; adenoviral vector; anti-apoptotic gene;
KW ischaemia; reperfusion injury; liver; organ preservation;
KW endothelial cell cryoprotection; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO9955382-A1.
PN
XX PD 04-NOV-1999.
XX
XX PF 29-APR-1999; 99WO-US009412.
XX
XX PR 29-APR-1998; 98US-0083434P.
XX
XX PA (UABR-) UAB RES FOUND.
XX
XX Bilbao G, Curiel DT, Contreras JL;
XX
XX WPI; 2000-023269/02.
XX
XX Adenoviral vector encoding anti-apoptotic Bcl-2 gene useful for
PT cytoprotection and in gene therapy.
XX
XX Example 9; Page 26; 89pp; English.
XX
XX This sequence represents a PCR primer for the human Bcl-2 gene. The
CC invention relates to an adenoviral vector encoding an anti-apoptotic Bcl-
CC 2 gene. The adenoviral vector may be used to reduce ischaemia/reperfusion
CC injury in the liver, improve organ preservation, cytoprotect endothelial
CC cells or pancreatic islet cells during cold preservation, or enhance or
CC prolong the expression of a transgene. The co-expression of Bcl-2 with a
CC transgene mediated a significant reduction in apoptosis and necrosis
CC following adenovirus mediated gene transfer, and an enhancement of
CC transgene expression (up to 2 log)
XX
XX Sequence 20 BP; 4 A; 1 C; 11 G; 4 T; 0 U; 0 Other;
SQ
Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 86 AGTGGGATCGGGGAGATGTG 105
DB 1 AGTGGGATCGGGGAGATGTG 20

RESULT 34
AAD15629
ID AAD15629 standard; DNA; 20 BP.
XX
XX AAD15629;
AC
XX 15-NOV-2001 (first entry)
XX
XX Human Bcl-2 protein target DNA #3.
DE
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX
XX Homo sapiens.
OS
XX WO200161030-A2.
PN
XX PD 23-AUG-2001.
XX
XX 14-FEB-2001; 2001WO-US004732.
PF
XX 14-FEB-2000; 2000US-00504653.
PR
XX (BOLL/) BOLLON A P.
PA

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PA (GRAY/) GRAY D M.
 PA (JUSE/) JU-SEOG L.
 XX Bollon AP, Gray DM, Ju-Seog L;
 XX WPI; 2001-529916/58.
 XX
 PT Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.
 XX
 PS Example 9; Page 28; 87pp; English.
 XX
 CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA
 XX
 SQ Sequence 20 BP; 0 A; 9 C; 10 G; 1 T; 0 U; 0 Other;
 Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 236 GCGCGCGCGCGCGCTGCG 235
 Db 1 GCGCGCGCGCGCGCTGCG 20
 |||||
 |||||

RESULT 35
 AAD15639
 ID AAD15639 standard; DNA; 20 BP.
 XX
 AC AAD15639;
 XX
 DT 15-NOV-2001 (first entry)
 XX
 DE Human Bcl-2 protein target DNA #13.
 XX
 KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200161030-A2.
 XX
 PD 23-AUG-2001.
 XX
 PF 14-FEB-2001; 2001WO-US004732.
 XX
 PR 14-FEB-2000; 2000US-00504653.
 XX
 PA (BOLL/) BOLLON A P.
 PA (GRAY/) GRAY D M.
 PA (JUSE/) JU-SEOG L.
 XX
 PI Bollon AP, Gray DM, Ju-Seog L;
 XX
 XX WPI; 2001-529916/58.
 DR
 XX
 PT Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.
 XX
 PS Example 9; Page 28; 87pp; English.
 XX
 CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA

CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA
 XX
 SQ Sequence 20 BP; 2 A; 5 C; 11 G; 2 T; 0 U; 0 Other;
 Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 96 GCGAGATGTGGCGCGCGC 115
 Db 1 GCGAGATGTGGCGCGCGC 20
 |||||
 |||||

RESULT 36
 AAD15640
 ID AAD15640 standard; DNA; 20 BP.
 XX
 AC AAD15640;
 XX
 DT 15-NOV-2001 (first entry)
 XX
 DE Human Bcl-2 protein target DNA #14.
 XX
 KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200161030-A2.
 XX
 PD 23-AUG-2001.
 XX
 PF 14-FEB-2001; 2001WO-US004732.
 XX
 PR 14-FEB-2000; 2000US-00504653.
 XX
 PA (BOLL/) BOLLON A P.
 PA (GRAY/) GRAY D M.
 PA (JUSE/) JU-SEOG L.
 XX
 PI Bollon AP, Gray DM, Ju-Seog L;
 XX
 XX WPI; 2001-529916/58.
 DR
 XX
 PT Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.
 XX
 PS Example 9; Page 28; 87pp; English.
 XX
 CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA
 XX
 SQ Sequence 20 BP; 1 A; 9 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 242 CCGCGGGCGCTGCGTCAGC 261
 Db 1 CCGCGGGCGCTGCGTCAGC 20
 |||||
 |||||

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PN WO200161030-A2.
XX 23-AUG-2001.
PD
XX
PF 14-FEB-2001; 2001WO-US004732.
XX
XX 14-FEB-2000; 2000US-00504653.
XX
XX (BOLL/) BOLLON A P.
PA (GRAY/) GRAY D M.
PA (JUSE/) JU-SEOG L.
XX
XX BOLLON AP, Gray DM, Ju-Seog L;
PI WPI; 2001-529916/58.
XX
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
PT expression of target mRNA for the therapeutic treatment of genetic
PT disease.
XX
XX Example 9; Page 28; 87pp; English.
XX
XX The invention relates to a method for selecting optimal subsequence
CC antisense targets. The method involves preparing an antisense
CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC sequences, as well as antisense oligonucleotides capable of binding DNA.
CC The antisense and antisense libraries are useful for preparing therapeutic
CC agents for the treatment of genetic disease. The present DNA sequence is
CC human Bcl-2 protein target DNA related to the invention. Note: The
CC present sequence is shown as DNA in the specification; however, in vivo,
CC this target sequence would be mRNA
XX
XX Sequence 20 BP; 0 A; 9 C; 10 G; 1 T; 0 U; 0 Other;
SQ
Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 235 GCGCGCGCGCGCGCGCTGC 254
DB 1 GCGCGCGCGCGCGCGCTGC 20
RESULT 39
AAD15631
ID AAD15631 standard; DNA; 20 BP.
XX
XX AAD15631;
AC
XX
XX 15-NOV-2001 (first entry)
DT
XX
XX Human Bcl-2 protein target DNA #5.
DE
XX
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX
XX Homo sapiens.
XX
XX WO200161030-A2.
PN
XX 23-AUG-2001.
PD
XX
XX 14-FEB-2001; 2001WO-US004732.
XX
XX 14-FEB-2000; 2000US-00504653.
XX
XX (BOLL/) BOLLON A P.
PA (GRAY/) GRAY D M.
PA (JUSE/) JU-SEOG L.
XX
XX BOLLON AP, Gray DM, Ju-Seog L;
PI WPI; 2001-529916/58.
XX
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
PT expression of target mRNA for the therapeutic treatment of genetic
PT disease.
XX
XX Example 9; Page 28; 87pp; English.
XX
XX The invention relates to a method for selecting optimal subsequence
CC antisense targets. The method involves preparing an antisense
CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC sequences, as well as antisense oligonucleotides capable of binding DNA.
CC The antisense and antisense libraries are useful for preparing therapeutic
CC agents for the treatment of genetic disease. The present DNA sequence is
CC human Bcl-2 protein target DNA related to the invention. Note: The
CC present sequence is shown as DNA in the specification; however, in vivo,
CC this target sequence would be mRNA
XX
XX Sequence 20 BP; 1 A; 9 C; 8 G; 2 T; 0 U; 0 Other;
SQ
Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 244 GCGGGGCTGGCTCAGCCC 263
DB 1 GCGGGGCTGGCTCAGCCC 20
RESULT 38
AAD15628
ID AAD15628 standard; DNA; 20 BP.
XX
XX AAD15628;
AC
XX
XX 15-NOV-2001 (first entry)
DT
XX
XX Human Bcl-2 protein target DNA #2.
DE
XX
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX
XX Homo sapiens.
XX
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PN WO200161030-A2.
XX 23-AUG-2001.
PD
XX
PF 14-FEB-2001; 2001WO-US004732.
XX
XX 14-FEB-2000; 2000US-00504653.
XX
XX (BOLL/) BOLLON A P.
PA (GRAY/) GRAY D M.
PA (JUSE/) JU-SEOG L.
XX
XX BOLLON AP, Gray DM, Ju-Seog L;
PI WPI; 2001-529916/58.
XX
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
PT expression of target mRNA for the therapeutic treatment of genetic
PT disease.
XX
XX Example 9; Page 28; 87pp; English.
XX
XX The invention relates to a method for selecting optimal subsequence
CC antisense targets. The method involves preparing an antisense
CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC sequences, as well as antisense oligonucleotides capable of binding DNA.
CC The antisense and antisense libraries are useful for preparing therapeutic
CC agents for the treatment of genetic disease. The present DNA sequence is
CC human Bcl-2 protein target DNA related to the invention. Note: The
CC present sequence is shown as DNA in the specification; however, in vivo,
CC this target sequence would be mRNA
XX
XX Sequence 20 BP; 1 A; 9 C; 8 G; 2 T; 0 U; 0 Other;
SQ
Query Match 3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 244 GCGGGGCTGGCTCAGCCC 263
DB 1 GCGGGGCTGGCTCAGCCC 20
RESULT 38
AAD15628
ID AAD15628 standard; DNA; 20 BP.
XX
XX AAD15628;
AC
XX
XX 15-NOV-2001 (first entry)
DT
XX
XX Human Bcl-2 protein target DNA #2.
DE
XX
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX
XX Homo sapiens.
XX
```

PT Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.
 XX
 PS Example 9; Page 28; 87pp; English.
 XX
 CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigenic libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA
 XX
 SQ Sequence 20 BP; 0 A; 10 C; 9 G; 1 T; 0 U; 0 Other;
 Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 237 CGCGCGCGCGCGCGCGCGC 256
 Db 1 CGCGCGCGCGCGCGCGCGC 20
 |||||
 RESULT 40
 AAD15641
 ID AAD15641 standard; DNA; 20 BP.
 XX
 AC AAD15641;
 XX
 DT 15-NOV-2001 (first entry)
 XX
 DE Human Bcl-2 protein target DNA #15.
 XX
 KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200161030-A2.
 XX
 PD 23-AUG-2001.
 XX
 PF 14-FEB-2001; 2001WO-US004732.
 XX
 PR 14-FEB-2000; 2000US-00504653.
 XX
 PA (BOLL/) BOLLON A P.
 PA (GRAY/) GRAY D M.
 PA (JUSE/) JU-SEOG L.
 XX
 PI Bollon AP, Gray DM, Ju-Seog L;
 XX
 DR WPI; 2001-529916/58.
 XX
 XX Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.
 XX
 PS Example 9; Page 28; 87pp; English.
 XX
 CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigenic libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA
 XX

SQ Sequence 20 BP; 1 A; 9 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 243 CGCGGGCGCTGGCTCAGCC 262
 Db 1 CGCGGGCGCTGGCTCAGCC 20
 |||||
 RESULT 41
 AAD15643
 ID AAD15643 standard; DNA; 20 BP.
 XX
 AC AAD15643;
 XX
 DT 15-NOV-2001 (first entry)
 XX
 DE Human Bcl-2 protein target DNA #17.
 XX
 KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200161030-A2.
 XX
 PD 23-AUG-2001.
 XX
 PF 14-FEB-2001; 2001WO-US004732.
 XX
 PR 14-FEB-2000; 2000US-00504653.
 XX
 PA (BOLL/) BOLLON A P.
 PA (GRAY/) GRAY D M.
 PA (JUSE/) JU-SEOG L.
 XX
 PI Bollon AP, Gray DM, Ju-Seog L;
 XX
 DR WPI; 2001-529916/58.
 XX
 XX Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.
 XX
 PS Example 9; Page 28; 87pp; English.
 XX
 CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigenic libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA
 XX
 SQ Sequence 20 BP; 1 A; 9 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 245 CGCGGGCGCTGGCTCAGCC 264
 Db 1 CGCGGGCGCTGGCTCAGCC 20
 |||||
 RESULT 42
 AAD15630
 ID AAD15630 standard; DNA; 20 BP.
 XX
 AC AAD15630;

XX 15-NOV-2001 (first entry)
XX Human Bcl-2 protein target DNA #4.
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX Homo sapiens.
XX WO200161030-A2.
XX 23-AUG-2001.
XX 14-FEB-2001; 2001WO-US004732.
XX 14-FEB-2000; 2000US-00504653.
XX (BOLL/) BOLLON A P.
XX (GRAY/) GRAY D M.
XX (JUSE/) JU-SEOG L.
XX Bollon AP, Gray DM, Ju-Seog L;
XX WPI; 2001-529916/58.
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
XX expression of target mRNA for the therapeutic treatment of genetic
XX disease.
XX Example 9; Page 28; 87pp; English.
XX The invention relates to a method for selecting optimal subsequence
XX antisense targets. The method involves preparing an antisense
XX oligonucleotide capable of inhibiting mRNA expression of target mRNA
XX sequences, as well as antisense oligonucleotides capable of binding DNA.
XX The antisense and antigen libraries are useful for preparing therapeutic
XX agents for the treatment of genetic disease. The present DNA sequence is
XX human Bcl-2 protein target DNA related to the invention. Note: The
XX present sequence is shown as DNA in the specification; however, in vivo,
XX this target sequence would be mRNA
XX Sequence 20 BP; 0 A; 11 C; 9 G; 0 T; 0 U; 0 Other;
XX Query Match 3.3%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 232 CCGCGCGCGCGCGCGGCC 251
XX 1 CCGCGCGCGCGCGCGGCC 20
XX
XX RESULT 43
XX AAD15633
XX ID AAD15633 standard; DNA; 20 BP.
XX AC AAD15633;
XX 15-NOV-2001 (first entry)
XX Human Bcl-2 protein target DNA #7.
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX Homo sapiens.
XX WO200161030-A2.
XX 23-AUG-2001.
XX 14-FEB-2001; 2001WO-US004732.
XX 14-FEB-2000; 2000US-00504653.
XX
XX 233 CCGCGCGCGCGCGCGGCC 258
XX 1 CCGCGCGCGCGCGCGGCC 20
XX
XX RESULT 44
XX AAD15637
XX ID AAD15637 standard; DNA; 20 BP.
XX AC AAD15637;
XX 15-NOV-2001 (first entry)
XX Human Bcl-2 protein target DNA #11.
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX Homo sapiens.
XX WO200161030-A2.
XX 23-AUG-2001.
XX 14-FEB-2001; 2001WO-US004732.
XX 14-FEB-2000; 2000US-00504653.
XX (BOLL/) BOLLON A P.
XX (GRAY/) GRAY D M.
XX (JUSE/) JU-SEOG L.
XX Bollon AP, Gray DM, Ju-Seog L;
XX WPI; 2001-529916/58.
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
XX expression of target mRNA for the therapeutic treatment of genetic
XX disease.
XX Example 9; Page 28; 87pp; English.
XX The invention relates to a method for selecting optimal subsequence

XX (BOLL/) BOLLON A P.
XX (GRAY/) GRAY D M.
XX (JUSE/) JU-SEOG L.
XX Bollon AP, Gray DM, Ju-Seog L;
XX WPI; 2001-529916/58.
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
XX expression of target mRNA for the therapeutic treatment of genetic
XX disease.
XX Example 9; Page 28; 87pp; English.
XX The invention relates to a method for selecting optimal subsequence
XX antisense targets. The method involves preparing an antisense
XX oligonucleotide capable of inhibiting mRNA expression of target mRNA
XX sequences, as well as antisense oligonucleotides capable of binding DNA.
XX The antisense and antigen libraries are useful for preparing therapeutic
XX agents for the treatment of genetic disease. The present DNA sequence is
XX human Bcl-2 protein target DNA related to the invention. Note: The
XX present sequence is shown as DNA in the specification; however, in vivo,
XX this target sequence would be mRNA
XX Sequence 20 BP; 0 A; 10 C; 8 G; 2 T; 0 U; 0 Other;
XX Query Match 3.3%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 239 CCGCGCGCGCGCGCGGCC 258
XX 1 CCGCGCGCGCGCGCGGCC 20
XX
XX RESULT 44
XX AAD15637
XX ID AAD15637 standard; DNA; 20 BP.
XX AC AAD15637;
XX 15-NOV-2001 (first entry)
XX Human Bcl-2 protein target DNA #11.
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX Homo sapiens.
XX WO200161030-A2.
XX 23-AUG-2001.
XX 14-FEB-2001; 2001WO-US004732.
XX 14-FEB-2000; 2000US-00504653.
XX (BOLL/) BOLLON A P.
XX (GRAY/) GRAY D M.
XX (JUSE/) JU-SEOG L.
XX Bollon AP, Gray DM, Ju-Seog L;
XX WPI; 2001-529916/58.
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
XX expression of target mRNA for the therapeutic treatment of genetic
XX disease.
XX Example 9; Page 28; 87pp; English.
XX The invention relates to a method for selecting optimal subsequence

CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA

XX SQ Sequence 20 BP; 2 A; 5 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 94 GCGGAGATGTCGGCGCGC 113

DB 1 GCGGAGATGTCGGCGCGC 20

RESULT 45

AA15635

ID AAD15635 standard; DNA; 20 BP.

XX AC AAD15635;

XX DT 15-NOV-2001 (first entry)

XX DE Human Bcl-2 protein target DNA #9.

XX KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.

XX OS Homo sapiens.

XX PN WO200161030-A2.

XX PD 23-AUG-2001.

XX PF 14-FEB-2001; 2001WO-US004732.

XX PR 14-FEB-2000; 2000US-00504653.

XX PA (BOLL/) BOLLON A P.

XX PA (GRAY/) GRAY D M.

XX PA (JUSE/) JU-SEOG L.

XX PI Bollon AP, Gray DM, Ju-Seog L;

XX DR WPI; 2001-529916/58.

XX PT Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.

XX PS Example 9; Page 28; 87pp; English.

XX CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA

XX SQ Sequence 20 BP; 1 A; 9 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 240 GCGCGGGCGCTGCGCTCA 259

DB 1 GCGCGGGCGCTGCGCTCA 20

RESULT 46

AA15634

ID AAD15634 standard; DNA; 20 BP.

XX AC AAD15634;

XX DT 15-NOV-2001 (first entry)

XX DE Human Bcl-2 protein target DNA #8.

XX KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.

XX OS Homo sapiens.

XX PN WO200161030-A2.

XX PD 23-AUG-2001.

XX PF 14-FEB-2001; 2001WO-US004732.

XX PR 14-FEB-2000; 2000US-00504653.

XX PA (BOLL/) BOLLON A P.

XX PA (GRAY/) GRAY D M.

XX PA (JUSE/) JU-SEOG L.

XX PI Bollon AP, Gray DM, Ju-Seog L;

XX DR WPI; 2001-529916/58.

XX PT Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.

XX PS Example 9; Page 28; 87pp; English.

XX CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA

XX SQ Sequence 20 BP; 1 A; 8 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 58;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 241 GCGCGGGCGCTGCGCTCAG 260

DB 1 GCGCGGGCGCTGCGCTCAG 20

RESULT 47

AA15646

ID AAD15646 standard; DNA; 20 BP.

XX AC AAD15646;

XX DT 15-NOV-2001 (first entry)

XX DE Human Bcl-2 protein target DNA #20.

XX KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.


```

CC this target sequence would be mRNA
XX Sequence 20 BP; 2 A; 5 C; 11 G; 2 T; 0 U; 0 Other;
SQ

Query Match      3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 95 CCGGAGATGCGCGCGCGG 114
Db 1 CCGGAGATGCGCGCGCGG 20

RESULT 50
AADI5632
ID AADI5632 standard; DNA; 20 BP.
XX
AC AADI5632;
XX
DT 15-NOV-2001 (first entry)
XX
DE Human Bcl-2 protein target DNA #6.
XX
KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX
OS Homo sapiens.
XX
FN WO200161030-A2.
XX
PD 23-AUG-2001.
XX
PF 14-FEB-2001; 2001WO-US004732.
XX
PR 14-FEB-2000; 2000US-00504653.
XX
PA (BOLL/) BOLLON A P.
XX
PA (GRAY/) GRAY D M.
XX
PA (JUSE/) JU-SEOG L.
XX
PI Bollon AP, Gray DM, Ju-Seog L;
XX
WI; 2001-529916/58.
XX
PT Selecting optimal subsequence antisense targets for inhibition of mRNA
PT expression of target mRNA for the therapeutic treatment of genetic
PT disease.
XX
PS Example 9; Page 28; 87pp; English.
XX
CC The invention relates to a method for selecting optimal subsequence
CC antisense targets. The method involves preparing an antisense
CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC sequences, as well as antisense oligonucleotides capable of binding DNA.
CC The antisense and antigenic libraries are useful for preparing therapeutic
CC agents for the treatment of genetic disease. The present DNA sequence is
CC human Bcl-2 protein target DNA related to the invention. Note: The
CC present sequence is shown as DNA in the specification; however, in vivo,
CC this target sequence would be mRNA
XX
SQ Sequence 20 BP; 1 A; 8 C; 9 G; 2 T; 0 U; 0 Other;
Query Match      3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 246 GGGGCGCTGCGCTCAGCCCGG 265
Db 1 GGGGCGCTGCGCTCAGCCCGG 20

RESULT 52
ABK90266/c
ID ABK90266 standard; DNA; 20 BP.
XX
AC ABK90266;
XX
DT 21-OCT-2002 (first entry)
XX
DE Bcl-2-targeting antisense oligonucleotide #3.
XX
KW Antisense; ss; probe; Bcl-2; cell proliferative disorder; cancer; CRE;
KW CAMP response element; bacterial infection; viral infection;
KW inflammation; anaphylaxis; allergy; arthritis; asthma; cycostatic;
KW autoimmune disorder; parasitic infection; virucide; hyperplasia;
KW tumorigenesis; hepatitis B infection; human.
XX
OS Homo sapiens.
XX
FN WO200257480-A2.
PN

```

```
XX PD 25-JUL-2002.
XX PF
XX PF 22-JAN-2002; 2002WO-US001967.
XX PF
XX PR 22-JAN-2001; 2001US-0263244P.
XX PR
XX PA (GENT-) GENTA INC.
XX PI Klem RE;
XX PI
XX DR WPI; 2002-590754/63.
XX DR
XX PF Hybrid oligomer comprises a cyclic AMP response element sequence and a
XX PF sequence that hybridizes to the bcl-2 pre-mRNA or mRNA useful for
XX PF preventing or treating cell-proliferative disorders e.g., cancer.
XX PF
XX PS Disclosure; Page 13; 78pp; English.
XX PS
XX CC The invention relates to a hybrid oligomer comprising a cyclic AMP
XX CC response element (CRE) sequence and a sequence that hybridizes to the bcl
XX CC -2 pre-mRNA or mRNA. Also included are: (1) inhibiting the growth of
XX CC cancer cells in vitro, which comprises contacting the cancer cells with a
XX CC hybrid oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer;
XX CC (2) treating or preventing cancer in a human, which comprises
XX CC administering a hybrid oligomer or a bcl-2 antisense oligomer and a CRE
XX CC decoy oligomer; and (3) a pharmaceutical composition comprising a hybrid
XX CC oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer and a
XX CC carrier. The pharmaceutical composition of the invention is useful for
XX CC preventing or treating cell-proliferative disorders e.g., cancer,
XX CC hyperplasia or tumorigenesis and also bacterial infection, viral
XX CC infection, inflammation, anaphylaxis, allergy, arthritis, asthma,
XX CC autoimmune disorders and parasitic infection. The CRE decoy oligomer and
XX CC bcl-2 antisense oligomer are also useful for preventing or treating
XX CC hepatitis B virus infection. The hybrid oligomers can also be used for
XX CC screening candidate transcription factors or other molecules e.g., gene
XX CC regulatory proteins or for diagnostic assays. The present sequence is a
XX CC Bcl-2 antisense oligonucleotide
XX SQ
XX Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 3.3%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 577 GGAGGCTGGGTAGTGATC 596
XX | | | | | | | | | | | | | | | | | |
XX DB 20 GGAGGCTGGGTAGTGATC 1
XX
XX RESULT 53
XX ABQ78524/c
XX ID ABQ78524 standard; DNA; 20 BP.
XX AC ABQ78524;
XX XX
XX DT 25-NOV-2002 (first entry)
XX DE
XX DE Antisense oligodeoxynucleotide of the human bcl-2 gene.
XX XX
XX KW Antisense oligonucleotide; B cell lymphoma/leukemia-2 gene; bcl-2 gene;
XX KW cancer; lymphoma; leukemia; chemotherapeutic agent; bone marrow purging;
XX KW autoimmune disease; ss.
XX OS Homo sapiens.
XX PN US6414134-B1.
XX XX
XX PD 02-JUL-2002.
XX PF
XX PF 28-NOV-2000; 2000US-00724426.
XX PF
XX PR 22-DEC-1998; 88US-00288692.
XX PR
XX
XX 21-FEB-1992; 92US-00840716.
XX 20-SEP-1993; 93US-00124256.
XX 05-JUN-1995; 95US-00465485.
XX 18-MAY-1998; 98US-0080285.
XX 17-AUG-1999; 99US-00375514.
XX
XX (UYPE-) UNIV PENNSYLVANIA.
XX
XX Reed JC;
XX
XX WPI; 2002-641579/69.
XX
XX Novel antisense oligonucleotide complementary to B cell lymphoma/leukemia
XX -2 mRNA, useful for inhibiting cancer cell growth, for treating
XX autoimmune disorders, and for ex vivo bone marrow purging.
XX
XX Example 1; Col 7-8; 41pp; English.
XX
XX The present sequence represents an antisense oligonucleotide
XX complementary to B cell lymphoma/leukemia-2 (bcl-2) mRNA. The antisense
XX oligonucleotide is useful for inhibiting cancer cell (lymphoma or
XX leukemia cells) growth, for increasing the sensitivity of cancer cells to
XX cancer chemotherapeutic agents, or for inducing cancer cell death alone
XX or in combination with any one or more cancer chemotherapeutic agents. It
XX is also useful for reducing the bcl-2 gene expression or impairing bcl-2
XX protein function, for ex vivo bone marrow purging, for removing residual
XX malignant cells from the bone marrow, for inhibiting cancer of neoplastic
XX cell growth, and for treating autoimmune disease
XX
XX Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 3.3%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 577 GGAGGCTGGGTAGTGATC 596
XX | | | | | | | | | | | | | | | | | |
XX DB 20 GGAGGCTGGGTAGTGATC 1
XX
XX RESULT 54
XX ABK52485/c
XX ID ABK52485 standard; DNA; 20 BP.
XX XX
XX AC ABK52485;
XX XX
XX DT 14-AUG-2002 (first entry)
XX DE
XX DE PCR primer #1 for DNA encoding human bcl-2.
XX XX
XX KW Human; detection of early stage allergic disease; atopic dermatitis;
XX KW antiallergic; eosinocyte; eosinophil; bcl-2; PCR; primer; ss.
XX OS Homo sapiens.
XX PN JP2002119281-A.
XX XX
XX PD 23-APR-2002.
XX PF
XX PF 11-OCT-2000; 2000JP-00311193.
XX XX
XX PR 11-OCT-2000; 2000JP-00311193.
XX XX
XX (GENO-) GENOX SOYAKU KENKYUSHO KK.
XX PA (KOKU-) KOKURITSU SHONI BYOIN INCHO.
XX XX
XX WPI; 2002-475327/51.
XX
XX Detecting early stage allergic diseases with markers of 7 genes of GM-CSF
XX R-beta, GM-CSF R-alpha, IL-3 R-alpha, PAF R, bcl-2, bcl-x and CD44 in
XX eosinophils.
XX
XX Example 1; Page 19; 25pp; Japanese.
```

XX CC The present invention relates to a method for detecting early stage
 CC allergic diseases, particularly atopic dermatitis. The method comprises
 CC determining the expression levels of granulocyte macrophage colony
 CC stimulating factor receptor alpha or beta (GM-CSF R-alpha or -beta),
 CC interleukin 3 receptor alpha (IL-3 R-alpha), bcl-2, bcl-x, platelet
 CC activation factor receptor (PAF R) or CD44 in eosinocytes of a subject to
 CC be tested. The method further comprises comparison with expression levels
 CC in healthy volunteers. The method is useful for the early diagnosis and
 CC treatment of early stage allergic diseases such as atopic dermatitis. The
 CC present sequence represents a PCR primer used in the methods of the
 CC present invention
 XX CC
 SQ Sequence 20 BP; 7 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 453 TGAGTTCGGTGGGTCATGT 472
 DB 20 TGAGTTCGGTGGGTCATGT 1
 |||||

RESULT 55
 ABK52486
 ID ABK52486 standard; DNA; 20 BP.
 XX AC ABK52486;
 XX DT 14-AUG-2002 (first entry)
 XX DE PCR primer #2 for DNA encoding human bcl-2.
 XX KW Human; detection of early stage allergic disease; atopic dermatitis;
 XX KW antiallergic; eosinocyte; eosinophil; bcl-2; PCR; primer; ss.
 XX OS Homo sapiens.
 XX PN JP2002119281-A.
 XX PD 23-APR-2002.
 XX PF 11-OCT-2000; 2000JP-00311193.
 XX PR 11-OCT-2000; 2000JP-00311193.
 XX PA (GENO-) GENOX SOYAKU KENKYUSHO KK.
 XX PA (KOKU-) KOKURITSU SHONI BYOIN INCHO.
 XX DR WPI; 2002-475327/51.
 XX PT Detecting early stage allergic diseases with markers of 7 genes of GM-CSF
 PT R-beta, GM-CSF R-alpha, IL-3 R-alpha, PAF R, bcl-2, bcl-x and CD44 in
 PT eosinophils.
 XX PS Example 1; Page 19; 25pp; Japanese.
 XX CC The present invention relates to a method for detecting early stage
 CC allergic diseases, particularly atopic dermatitis. The method comprises
 CC determining the expression levels of granulocyte macrophage colony
 CC stimulating factor receptor alpha or beta (GM-CSF R-alpha or -beta),
 CC interleukin 3 receptor alpha (IL-3 R-alpha), bcl-2, bcl-x, platelet
 CC activation factor receptor (PAF R) or CD44 in eosinocytes of a subject to
 CC be tested. The method further comprises comparison with expression levels
 CC in healthy volunteers. The method is useful for the early diagnosis and
 CC treatment of early stage allergic diseases such as atopic dermatitis. The
 CC present sequence represents a PCR primer used in the methods of the
 CC present invention
 XX CC
 SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 401 TGGAGGAGCTCTTCAGGAC 420
 DB 1 TGGAGGAGCTCTTCAGGAC 20
 |||||

RESULT 56
 ABL54151/c
 ID ABL54151 standard; DNA; 20 BP.
 XX AC ABL54151;
 XX DT 12-JUL-2002 (first entry)
 XX DE Bcl-2 antisense oligonucleotide.
 XX KW B cell lymphoma/leukaemia-2; bcl-2; oncogene; antisense; lymphoma;
 KW leukaemia; colon carcinoma; rectal carcinoma; pancreatic cancer;
 KW breast cancer; ovarian cancer; prostate cancer; renal cell carcinoma;
 KW hepatoma; bile duct carcinoma; choriocarcinoma; cervical cancer;
 KW testicular cancer; lung carcinoma; bladder carcinoma; melanoma;
 KW head and neck cancer; brain cancer; cytostatic; human; gene therapy; ss.
 XX OS Homo sapiens.
 XX PN WO200217852-A2.
 XX PD 07-MAR-2002.
 XX PF 23-AUG-2001; 2001WO-US026414.
 XX PR 25-AUG-2000; 2000US-0227970P.
 XX PR 29-SEP-2000; 2000US-0237009P.
 XX PR 10-NOV-2000; 2000US-00709170.
 XX PA (GENT-) GENTA INC.
 XX PT Warrel RP, Klem RE, Fingert H;
 XX WPI; 2002-371796/40.
 XX PT Treating or preventing cancer, tumors and carcinomas, comprises
 PT administering B cell lymphoma/leukemia-2 antisense oligonucleotide at
 PT high doses for short period for time with one or more cancer
 PT therapeutics.
 XX PS Disclosure; Page 53; 64pp; English.
 XX CC The present sequence is that of a B cell lymphoma/leukaemia-2 (bcl-2)
 CC antisense oligonucleotide. The present invention is directed to the use
 CC of bcl-2 antisense oligomers, particularly G3139 (see ABL54148), to treat
 CC and prevent bcl-2 related disorders. Administration at high doses results
 CC in significant therapeutic responses, including low toxicity, high
 CC tolerance and prolonged survival. Administration at high doses for short
 CC periods of time (less than 14 days) also provides significant therapeutic
 CC responses in the treatment of cancer. The bcl-2 antisense oligomer may
 CC also be used to increase the sensitivity of a subject to cancer
 CC therapeutics, and in combination with hormone treatment or gene therapy.
 CC Conditions that may be treated or prevented include cancer of the
 CC hematopoietic system, skin, bone and soft tissue, reproductive system,
 CC genitourinary system, breast, endocrine system, brain, central nervous
 CC system, peripheral nervous system, kidney, lung, respiratory system,
 CC thorax, gastrointestinal and alimentary canal, lymph nodes, pancreas,
 CC hepatobiliary system, or cancer of unknown primary site, non-Hodgkin's
 CC lymphoma, Hodgkin's lymphoma, leukaemia, colon carcinoma, rectal
 CC carcinoma, pancreatic, breast, ovarian, prostate, cervical, testicular,
 CC head and neck or brain cancer, renal cell carcinoma, hepatoma, bile duct
 CC carcinoma, choriocarcinoma, lung carcinoma, bladder carcinoma and
 CC melanoma (all claimed)
 XX CC
 SQ Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 577 GGAGGCTGGTAGTGCATC 596
 DB 20 GGAGGCTGGTAGTGCATC 1

RESULT 57
 ABT16736/c
 ID ABT16736 standard; DNA; 20 BP.
 XX
 AC ABT16736;
 XX
 DT 03-APR-2003 (first entry)
 XX
 DE bcl-2 PCR primer SEQ ID No 98.
 XX
 DE Anti-tumour; DNazyme; bcl-2 gene; tumour; malignant; chemotherapy;
 KW radiation therapy; enzyme; PCR; primer; ss.
 XX
 OS Unidentified.
 XX
 FN WO200299090-A1.
 XX
 PD 12-DEC-2002.
 XX
 PF 07-JUN-2002; 2002WO-AU000739.
 XX
 PR 07-JUN-2001; 2001AU-00005527.
 XX
 PA (JOHU) JOHNSON & JOHNSON RES PTY LTD.
 XX
 PI Sun L, Wang L, Turner RJ, Saravolac EG, Dass CR;
 XX
 DR WPI; 2003-140617/13.
 XX
 PT Novel DNazyme useful for treating tumors, and for enhancing the
 PT sensitivity of malignant or virus infected cells to therapy, comprises a
 PT catalytic domain and binding domain contiguous to the catalytic domain.
 XX
 PS Example 1; Page 16; 67pp; English.
 XX
 CC The invention relates to a DNazyme which specifically cleaves mRNA
 CC transcribed from a member of the bcl-2 gene family. The DNazymes comprise
 CC a catalytic domain, binding domains contiguous with the 5' and 3' end of
 CC the catalytic domain, and therefore hybridise with, the two regions
 CC immediately flanking the purine residue of the cleavage site within the
 CC bcl-2 gene family mRNA, at which DNazyme-catalysed cleavage is desired. A
 CC pharmaceutical composition comprising a DNazyme of the invention is
 CC useful for treating tumors in a subject, and for enhancing the
 CC sensitivity of malignant or virus infected cells infected cells to
 CC therapy. The DNazymes are useful in diagnostics, therapeutics,
 CC prophylaxis, research agents and in kits. The DNazymes are also useful
 CC for increasing the susceptibility of tumour cells to anti-tumour
 CC therapies such as chemotherapy and radiation therapy. This polynucleotide
 CC sequence represents a bcl-2 PCR primer of the invention
 XX
 SQ Sequence 20 BP; 3 A; 12 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 421 GGGGTGAAGTGGGGAGCAT 440
 DB 20 GGGGTGAAGTGGGGAGCAT 1

RESULT 58
 ACC99688

ACC99688 standard; DNA; 20 BP.
 XX
 AC ACC99688;
 XX
 DT 02-SEP-2003 (first entry)
 XX
 DE Bcl2 PCR primer SEQ ID NO:69.
 XX
 KW Multiplex real-time quantitative PCR; PCR primer; copy number;
 KW Alzheimer's disease; ss.
 XX
 OS Synthetic.
 XX
 FN WO2003048377-A2.
 XX
 PD 12-JUN-2003.
 XX
 PF 02-DEC-2002; 2002WO-US038806.
 XX
 PR 30-NOV-2001; 2001US-0336095P.
 PR 19-JUL-2002; 2002US-0397475P.
 XX
 PA (UYRP) UNIV ROCHESTER.
 PA (THER/) THERIANOS S.
 XX
 PI Zhu M, Coleman P;
 XX
 WPI; 2003-532841/50.
 XX
 DR
 XX
 PT Determining the relative copy number of a group of target nucleic acid
 PT molecules present in a sample by performing a first or second PCR in a
 PT PCR mixture and quantifying the number of copies of the second target
 PT nucleic acid product.
 XX
 PS Disclosure; Fig 6; 118pp; English.
 XX
 CC The present invention describes a multiplex real-time quantitative PCR
 CC method for determining the relative copy number of a group of target
 CC nucleic acid molecules present in a sample. The method comprises: (1)
 CC performing a first PCR in a PCR mixture; (2) performing a second PCR in a
 CC PCR mixture; and (3) quantifying the number of copies of the second
 CC target nucleic acid product present in the sample containing the target
 CC nucleic acid molecule. Also described: (1) quantifying the copy number of
 CC a group of target nucleic acids in a sample; and (2) determining whether
 CC a subject is at risk of acquiring Alzheimer's disease. The method is
 CC useful for determining the relative copy number of a group of target
 CC nucleic acid molecules present in a sample for determining whether a
 CC subject is at risk of acquiring Alzheimer's disease. ACC99620 to ACC99730
 CC represent PCR primer used in the exemplification of the present invention
 XX
 SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 3.3%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 469 ATGTGTGTGGAGCGTCAA 488
 DB 1 ATGTGTGTGGAGCGTCAA 20

RESULT 59
 ADC66004/c
 ID ADC66004 standard; DNA; 20 BP.
 XX
 AC ADC66004;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Phosphorothioate containing oligonucleotide.
 DE ss; sulphurisation; phosphorus-containing compound; phosphorothioate.
 KW
 XX

```

OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "Phosphorothioate backbone"
XX
XX US2003139592-A1.
XX
XX PD 24-JUL-2003.
XX
XX 07-OCT-2002; 2002US-00266027.
XX
XX 08-OCT-1998; 98US-00168447.
XX 12-OCT-1999; 99US-00416031.
XX
XX (NATT/) MARTIN P.
XX (NATT/) NATT F J C.
XX
XX Martin P, Matt FJC;
XX
XX WPI; 2003-765747/72.
XX
XX Sulfurization of phosphorus-containing compounds useful in making, e.g.
XX phosphorothioate-containing antisense oligonucleotides, comprises
XX contacting phosphorus compound to be sulfurized with sulfur transfer
XX reagent.
XX
XX Example; Page 3; 7pp; English.
XX
XX The invention relates to the sulphurisation of phosphorus-containing
XX compounds comprising contacting the phosphorus compound to be sulphurised
XX with a sulphur transfer reagent of structure/formulae detailed in the
XX specification. The phosphorus-containing compounds are, e.g.
XX phosphorothioate-containing antisense oligonucleotides useful in vitro
XX and in vivo as inhibitors of gene expression. The method provides
XX excellent yields, good solubility, stable solutions, and short reaction
XX times. It eliminates the formation of phosphorous-oxygen double bond
XX (P=O) units. It does not require additional reagents. It has no side
XX reactions with other parts of the molecule, odourless itself and its
XX reaction products, capable of regeneration, and easily available. The
XX present sequence is a phosphorothioate containing oligonucleotide
XX produced by the method of the invention.
XX
XX Sequence 20 BP; 4 A; 11 C; 1 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 3.3%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 422 GGCTGAACCTGGGGGAGATT 441
XX |||||
XX DB 20 GGCTGAACCTGGGGGAGATT 1
XX
XX RESULT 60
XX AAQ51957
XX ID AAQ51957 standard; RNA; 19 BP.
XX
XX AC AAQ51957;
XX
XX 25-MAR-2003 (revised)
XX 26-MAY-1994 (first entry)
XX
XX DE BCL-2 mRNA ribozyme cleavable nucleotide (1807).
XX
XX Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
XX resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
XX actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
XX adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
XX human; chronic myelogenous leukemia; CML; follicular lymphoma;

```

```

KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
XX
XX Homo sapiens.
XX
XX W09323057-A1.
XX
XX 25-NOV-1993.
XX
XX 13-MAY-1993; 93WO-US004573.
XX
XX 14-MAY-1992; 92US-00882822.
XX 14-MAY-1992; 92US-00882885.
XX 26-AUG-1992; 92US-00936110.
XX 26-AUG-1992; 92US-00936421.
XX 26-AUG-1992; 92US-00936422.
XX 26-AUG-1992; 92US-00936531.
XX 26-AUG-1992; 92US-00936532.
XX 07-DEC-1992; 92US-00987131.
XX 19-JAN-1993; 93US-00006122.
XX 19-JAN-1993; 93US-00008910.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Thompson JD, Draper KG;
XX
XX WPI; 1993-386203/48.
XX
XX New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
XX with tumours or mRNA expressed from gene encoding multiple drug
XX resistance.
XX
XX Claim 3; Fig 6; 69pp; English.
XX
XX The sequences given in AAQ51825-2266 represent areas of mRNAs which are
XX associated with development or maintenance of chronic myelogenous
XX leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
XX lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
XX leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
XX The full length mRNAs containing these target sequences, encode aberrant
XX cellular proteins which are able to control cellular proliferation and
XX are directly linked to a leukemic phenotype. These target sequences are
XX identified by the ribozyme of the invention. The ribozymes are formed in a
XX hammerhead motif, but may also be formed in the motif of a hairpin,
XX hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
XX may be used to inhibit the development or expression of a transformed
XX phenotype in man and other animals by modulating expression of the
XX corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
XX and transformed cells elicits inhibition of the transformed state.
XX Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
XX mechanism of drug resistance used by transformed cells and thus enhances
XX drug therapies for tumours. The ribozymes may also be used to study
XX genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
XX correct PN field.)
XX
XX Sequence 19 BP; 4 A; 8 C; 5 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 3.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 68;
XX Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 349 AGCCAGCTGCACCTGACGC 367
XX |||||
XX DB 1 AGCCAGCUGCACCUGACGC 19
XX
XX RESULT 61
XX AAQ51958
XX ID AAQ51958 standard; RNA; 19 BP.
XX
XX AC AAQ51958;
XX

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DT 26-MAY-1994 (first entry)
DE BCL-2 mRNA ribozyme cleavable nucleotide (1836).
XX
XX Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
XX resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
XX
OS Homo sapiens.
XX
XX WO9323057-A1.
XX
XX 25-NOV-1993.
XX
XX 13-MAY-1993; 93WO-US004573.
XX
XX 14-MAY-1992; 92US-00882822.
XX 14-MAY-1992; 92US-00882885.
XX 26-AUG-1992; 92US-00936110.
XX 26-AUG-1992; 92US-00936421.
XX 26-AUG-1992; 92US-00936422.
XX 26-AUG-1992; 92US-00936531.
XX 26-AUG-1992; 92US-00936532.
XX 07-DEC-1992; 92US-00987131.
XX 19-JAN-1993; 93US-00006122.
XX 19-JAN-1993; 93US-00008910.
XX (RIBO-): RIBOZYME PHARM INC.
XX
XX Thompson JD, Draper KG;
XX
XX WPI; 1993-386203/48.
XX
XX New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
XX with tumours or mRNA expressed from gene encoding multiple drug
XX resistance.
XX
XX Claim 3; Fig 6; 69pp; English.
XX
XX The sequences given in AAQ51825-2266 represent areas of mRNAs which are
XX associated with development or maintenance of chronic myelogenous
XX leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
XX lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
XX leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
XX The full length mRNAs containing these target sequences, encode aberrant
XX cellular proteins which are able to control cellular proliferation and
XX are directly linked to a leukemic phenotype. These target sequences are
XX identified by the ribozyme of the invention. The ribozymes is formed in a
XX hammerhead motif, but may also be formed in the motif of a hairpin,
XX hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
XX may be used to inhibit the development or expression of a transformed
XX phenotype in man and other animals by modulating expression of the
XX corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
XX and transformed cells elicits inhibition of the transformed state.
XX Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
XX mechanism of drug resistance used by transformed cells and thus enhances
XX drug therapies for tumours. The ribozymes may also be used to study
XX genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
XX correct FN field.)
SQ Sequence 19 BP; 2 A; 6 C; 8 G; 0 T; 3 U; 0 Other;
Query Match 3.1%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 68;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
OY 378 GCGGGACGCTTGCACG 396
|||||||:|:|:|:|:|:|

Db 1 GCGGGACGCTTGCACG 19
RESULT 62
AAQ51960
ID AAQ51960 standard; RNA; 19 BP.
XX
XX AC AAQ51960;
XX
XX 25-MAR-2003 (revised)
DT 26-MAY-1994 (first entry)
XX
XX BCL-2 mRNA ribozyme cleavable nucleotide (1972).
XX
XX Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
XX resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
XX
XX Homo sapiens.
XX
XX WO9323057-A1.
XX
XX 25-NOV-1993.
XX
XX 13-MAY-1993; 93WO-US004573.
XX
XX 14-MAY-1992; 92US-00882822.
XX 14-MAY-1992; 92US-00882885.
XX 26-AUG-1992; 92US-00936110.
XX 26-AUG-1992; 92US-00936421.
XX 26-AUG-1992; 92US-00936422.
XX 26-AUG-1992; 92US-00936531.
XX 26-AUG-1992; 92US-00936532.
XX 07-DEC-1992; 92US-00987131.
XX 19-JAN-1993; 93US-00006122.
XX 19-JAN-1993; 93US-00008910.
XX (RIBO-): RIBOZYME PHARM INC.
XX
XX Thompson JD, Draper KG;
XX
XX WPI; 1993-386203/48.
XX
XX New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
XX with tumours or mRNA expressed from gene encoding multiple drug
XX resistance.
XX
XX Claim 3; Fig 6; 69pp; English.
XX
XX The sequences given in AAQ51825-2266 represent areas of mRNAs which are
XX associated with development or maintenance of chronic myelogenous
XX leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
XX lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
XX leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
XX The full length mRNAs containing these target sequences, encode aberrant
XX cellular proteins which are able to control cellular proliferation and
XX are directly linked to a leukemic phenotype. These target sequences are
XX identified by the ribozyme of the invention. The ribozymes is formed in a
XX hammerhead motif, but may also be formed in the motif of a hairpin,
XX hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
XX may be used to inhibit the development or expression of a transformed
XX phenotype in man and other animals by modulating expression of the
XX corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
XX and transformed cells elicits inhibition of the transformed state.
XX Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
XX mechanism of drug resistance used by transformed cells and thus enhances
XX drug therapies for tumours. The ribozymes may also be used to study
XX genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
XX correct FN field.)

```

CC correct PN field.)
XX
SQ Sequence 19 BP; 5 A; 5 C; 5 G; 0 T; 4 U; 0 Other;

Query Match          3.1%; Score 19; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 68;
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 514 AACATCGCCCTGTGGATGA 532
   |||:|||||:|||||:
Db 1 AACACGCCCCUGUGGAUGA 19

RESULT 63
AA95740
ID AAA95740 standard; DNA; 19 BP.
XX
AC AAA95740;
XX
DT 14-FEB-2001 (first entry)
XX
XX PKalpha primer-pair amplification primer FUP100.
XX
DE Amplification; primer pair; anchor; reverse transcriptase;
KW DNA polymerase; complementation; stem structure; ss.
XX
XX Homo sapiens.
XX
XX WO200061807-A1.
XX
XX 19-OCT-2000.
XX
XX 07-APR-2000; 2000WO-US009230.
XX
XX 08-APR-1999; 99US-0128378P.
XX
XX (OASI-) OASIS BIOSCIENCES INC.
XX
XX Brown BD;
XX
XX WPI; 2001-031588/04.
XX
XX Novel primer pairs useful for amplifying and sequencing nucleic acid
PT sequences, comprising oligonucleotide anchors and primers.
XX
XX Example 1; Page 8; 21pp; English.
XX
XX The invention relates to amplifying a target nucleic acid sequence using
CC a primer pair comprising an oligonucleotide anchor and primer, where the
CC anchor is not a substrate for reverse transcriptase or DNA polymerase
CC and/or has a 3' end which is not capable of priming nucleic acid
CC synthesis, the primer part is a substrate for reverse transcriptase or
CC DNA polymerase and both the anchor and the primer include a region of
CC complementary nucleotides capable of associating to form a stem
CC structure. The method comprises amplifying the target nucleic acid
CC sequence with paired forward anchor (FA)-forward primer (FP), and reverse
CC anchor (RA)-reverse primer (RP), where the FA/FP form a first primer pair
CC and the RA/RP form a second primer pair via association of their
CC complementary stem regions. The primers are selected on the basis of
CC complementarity to the target nucleic acid sequence and amplification is
CC via enzyme-mediated amplification. This sequence represents an example of
CC a forward universal primer which is complementary to the FA-FP pair
XX
XX Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match          3.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 68;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 267 GCACCTGTGGTCCACCTG 285
   |||:|||||:|||||:
Db 1 GCACCTGTGGTCCACCTG 19

RESULT 64
ABN88834
ID ABN88834 standard; DNA; 19 BP.
XX
AC ABN88834;
XX
DT 21-AUG-2002 (first entry)
XX
XX Human bcl-2 PCR primer SEQ ID NO:23.
XX
XX Apoptosis-inducing ribozyme; hammerhead ribozyme; ribozyme; MT;
KW metallothionein; cancer; tumour; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX Synthetic.
XX
XX WO200236740-A2.
XX
XX 10-MAY-2002.
XX
XX 31-OCT-2001; 2001WO-US046062.
XX
XX 31-OCT-2000; 2000US-0244709P.
XX
XX (UTMA-) UNIV MASSACHUSETTS MEDICAL CENT.
XX
XX Lee K, Lau K, Ho S;
XX
XX WPI; 2002-479757/51.
XX
XX New ribozymes directed against metallothionein mRNAs, useful for inducing
PT apoptosis in human cancer cells, for inhibiting tumor growth and for
PT enhancing the effectiveness of chemotherapy or radiation therapy against
PT cancer cells.
XX
XX Example 11; Page 33; 63pp; English.
XX
XX The present invention describes a ribozyme comprising Hu MT-1a Rz, Hu MT-
CC 1e/r Rz, Hu MT-1f Rz, Hu MT-1b Rz, Hu MT-1g/hx/-1i Rz, Rz1-2, or Rz4-9
CC (see ABN88812 to ABN88818). The ribozymes have cytostatic activity. The
CC ribozymes are targeted to metallothionein (MT) and so are metallothionein
CC inhibitors and apoptosis inducers. The ribozymes are useful for inducing
CC apoptosis in human cancer cells, for inhibiting tumor growth, and for
CC enhancing the effectiveness of chemotherapy or radiation therapy against
CC cancer cells. The ribozyme-based methods for treating cancer, from the
CC present invention, offer the following advantages over conventional
CC antisense-based methods of limiting metallothionein production in target
CC cells: (1) ribozymes destroy metallothionein-encoding mRNAs rather than
CC merely hybridizing them; (2) ribozymes act like enzymes and each molecule
CC can be recycled to degrade multiple mRNA molecules; (3) a ribozyme need
CC not have perfect complementarity with a target mRNA to destroy the RNA;
CC and (4) a single ribozyme can be designed to destroy several related
CC mRNAs that encode different metallothioneins more readily than a
CC conventional antisense molecule can be designed to be effective against
CC various mRNAs. ABN88819 to ABN88870 represent sequences used in the
CC exemplification of the present invention
XX
XX Sequence 19 BP; 3 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match          3.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 68;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 356 TGCACCTGACGCCCTTCAC 374
   |||:|||||:|||||:
Db 1 TGCACCTGACGCCCTTCAC 19

RESULT 65
AAD15645
ID AAD15645 standard; DNA; 20 BP.
XX
XX

```


CC expression of the Bcl-2 gene. The Bcl-2 gene is relevant to the
 CC occurrence and development of various tumours. The antisense
 CC oligonucleotide blocks the synthesis of the Bcl-2 protein. The antisense
 CC oligonucleotide can be used for inhibiting the development of tumour
 CC cells, and to cure human malignant tumour. It can also be used to cure
 CC small-cell lung cancer and prostate tumour
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 3.0%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 83;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 343 ATGTCCAGCCAGCTGGACCT 362
 20 ATGTCCAGGAGCTGACCT 1

RESULT 68
 AAX09086/c
 ID AAX09086 standard; DNA; 20 BP.

XX AC AAX09086;
 XX DT 14-JUN-1999 (first entry)
 XX DE Tumour necrosis factor alpha antisense oligonucleotide.
 XX KW Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO;
 XX KW inhibition; expression; treatment; disease; disorder; ss.

OS Synthetic.
 OS Homo sapiens.
 XX WO9901139-A1.
 XX PD 14-JAN-1999.

PF 02-JUL-1998; 98WO-US013711.

XX 03-JUL-1997; 97US-0051705P.

PA (UVE-) UNIV JEFFERSON THOMAS.

PI Tu G, Israel Y;

XX WPI; 1999-105767/09.

XX Generation of antisense oligonucleotides - by specifically targeting a
 PT GGGA motif found in mRNA sequences.

XX Example 2; Page 37; 55pp; English.

XX Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor-
 CC alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50
 CC nucleotides, 90% of which are complementary to a region of mRNA
 CC containing a GGGA sequence motif. The ASO is used to inhibit expression
 CC of a gene in an animal and for treating the animal when afflicted with a
 CC disease or disorder characterised by the presence of an mRNA from a gene
 CC containing a GGGA motif. The ASO are specifically targeted to a GGGA
 CC sequence motif found in mRNA from a gene. A study of known ASO has shown
 CC that at least half of the most efficacious ASO's contain one or more TCCC
 CC motifs. This ASO comprises a TCCC motif followed by a adenine residue and
 CC corresponds to a region of the human bcl-2 open reading frame

XX Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 3.0%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 83;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGGCACGCTGGAGAAC 20
 |||||

Db 20 ATGGCACAGCTGGAGAAC 1
 RESULT 69
 AAH48720/c
 ID AAH48720 standard; DNA; 20 BP.

XX AC AAH48720;

XX DT 19-OCT-2001 (first entry)

XX DE Proto-oncogene bcl-2 associated primer SEQ ID 1.

XX KW Primer; phosphorothioate; somatostatin; cytostatic; virucide; asthma;
 XX KW antiinflammatory; antiasthmatic; cardiant; antisense therapy; cancer;
 XX KW viral disease; inflammatory process; somatostatin receptor;
 XX KW central nervous system disease; cardiovascular disease; SSIR;
 XX KW proto-oncogene; bcl-2; ss.

OS Unidentified.

XX PH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate"

PN DE10006572-A1.

XX PD 23-AUG-2001.

XX PF 14-FEB-2000; 2000DE-01006572.

XX PR 14-FEB-2000; 2000DE-01006572.

XX PA (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.

XX PI Eisenhut M, Mier W, Britia R, Haberkorn U;

XX DR WPI; 2001-530596/59.

XX New conjugates of oligonucleotides with somatostatin analogs, useful in
 PT antisense therapy, e.g. of viral, inflammatory or asthmatic disease or
 PT especially tumors overexpressing the somatostatin receptor.

XX Claim 14; Page 9; 16pp; German.

XX This invention describes a novel oligonucleotide conjugate (I) comprising
 CC (a) an oligonucleotide, at least part of the sequence of which is
 CC complementary to part of an intracellular nucleic acid sequence; and (b)
 CC a somatostatin analog. The products of the invention have cytostatic,
 CC virucide, antiinflammatory, antiasthmatic and cardiant activity. The use
 CC of (I) is claimed in antisense therapy, especially of cancer, viral
 CC disease, inflammatory processes or asthmatic, central nervous system or
 CC cardiovascular disease. (I) are especially used for therapy of tumors
 CC overexpressing the somatostatin receptor (SSIR) (e.g. small-cell lung
 CC tumors, breast tumors, brain tumors or other endocrine tumors), but are
 CC also useful for treating viral diseases (e.g. herpes simplex-1
 CC infection), inflammatory disease (typical target RNA the NF-kappa-B),
 CC asthmatic disease (typical target RNA the adenosine A1 receptor), central
 CC nervous system disease (typical target RNA the dopamine receptor) or
 CC cardiovascular disease (typical target RNA c-myc). (I) are efficiently
 CC taken up by cells and incorporated in target cells (via the SSIR) and are
 CC highly selective for cells overexpressing SSIR's. This sequence
 CC represents a primer used to illustrate the method of the invention

XX Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 3.0%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 83;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGGCACGCTGGAGAAC 20

```
Db      20 ATGGCACACGCTGGGAGAAC 1
|||||
RESULT 70
AAH48721
ID      AAH48721 standard; DNA; 20 BP.
XX
AC      AAH48721;
XX
DT      19-OCT-2001 (first entry)
XX
DE      Proto-oncogene bcl-2 associated primer SEQ ID 2.
XX
KW      Primer; phosphorothioate; somatostatin; cytostatic; virucide; asthma;
KW      antiinflammatory; antiasthmatic; cardiant; antisense therapy; cancer;
KW      viral disease; inflammatory process; somatostatin receptor;
KW      central nervous system disease; cardiovascular disease; SSTR;
KW      proto-oncogene; bcl-2; ss.
XX
OS      Unidentified.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1..20
FT      /*tag= a
FT      /*mod_base= OTHER
FT      /*note= "phosphorothioate"
XX
PN      DE10006572-A1.
XX
PD      23-AUG-2001.
XX
PF      14-FEB-2000; 2000DE-01006572.
XX
PR      14-FEB-2000; 2000DE-01006572.
XX
PA      (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
XX
PI      Eisenhut M, Mier W, Eritia R, Haberkorn U;
XX
PS      WPI; 2001-530596/59.
XX
PT      New conjugates of oligonucleotides with somatostatin analogs, useful in
PT      antisense therapy, e.g. of viral, inflammatory or asthmatic disease or
PT      especially tumors overexpressing the somatostatin receptor.
XX
PS      Example 1; Page 9; 16pp; German.
XX
CC      This invention describes a novel oligonucleotide conjugate (I) comprising
CC      (a) an oligonucleotide, at least part of the sequence of which is
CC      complementary to part of an intracellular nucleic acid sequence; and (b)
CC      a somatostatin analog. The products of the invention have cytostatic,
CC      virucide, antiinflammatory, antiasthmatic and cardiant activity. The use
CC      of (I) is claimed in antisense therapy, especially of cancer, viral
CC      disease, inflammatory processes or asthmatic, central nervous system or
CC      cardiovascular disease. (I) are especially used for therapy of tumors
CC      overexpressing the somatostatin receptor (SSTR) (e.g. small-cell lung
CC      tumors, breast tumors, brain tumors or other endocrine tumors), but are
CC      also useful for treating viral diseases (e.g. herpes simplex-1
CC      infection), inflammatory disease (typical target RNA the NF-kappa-B),
CC      asthmatic disease (typical target RNA the adenosine A1 receptor), central
CC      nervous system disease (typical target RNA the dopamine receptor) or
CC      cardiovascular disease (typical target RNA c-myc). (I) are efficiently
CC      taken up by cells and incorporated in target cells (via the SSTR) and are
CC      highly selective for cells overexpressing SSTR's. This sequence
CC      represents a primer used to illustrate the method of the invention
XX
SQ      Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
Query Match      3.0%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 83;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db      20 ATGGCACACGCTGGGAGAAC 1
|||||
RESULT 71
AAD15644
ID      AAD15644 standard; DNA; 20 BP.
XX
AC      AAD15644;
XX
DT      15-NOV-2001 (first entry)
XX
DE      Human Bcl-2 protein target DNA #18.
XX
KW      Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX
OS      Homo sapiens.
XX
PN      WO200161030-A2.
XX
PD      23-AUG-2001.
XX
PF      14-FEB-2001; 2001WO-US004732.
XX
PR      14-FEB-2000; 2000US-00504653.
XX
PA      (BOLL/) BOLLON A P.
PA      (GRAY/) GRAY D M.
PA      (JUUSE/) JU-SEOG L.
XX
PI      Bollon AP, Gray DM, Ju-Seog L;
XX
PS      WPI; 2001-529916/58.
XX
PT      Selecting optimal subsequence antisense targets for inhibition of mRNA
PT      expression of target mRNA for the therapeutic treatment of genetic
PT      disease.
XX
PS      Example 9; Page 28; 87pp; English.
XX
CC      The invention relates to a method for selecting optimal subsequence
CC      antisense targets. The method involves preparing an antisense
CC      oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC      sequences, as well as antisense oligonucleotides capable of binding DNA.
CC      The antisense and antigen libraries are useful for preparing therapeutic
CC      agents for the treatment of genetic disease. The present DNA sequence is
CC      human Bcl-2 protein target DNA related to the invention. Note: The
CC      present sequence is shown as DNA in the specification, however, in vivo,
CC      this target sequence would be mRNA
XX
SQ      Sequence 20 BP; 3 A; 11 C; 6 G; 0 T; 0 U; 0 Other;
Query Match      3.0%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 83;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db      152 CCCAGCCCGGGCACACGCC 171
|||||
AAC65072/c
ID      AAC65072 standard; DNA; 19 BP.
XX
AC      AAC65072;
XX
DT      12-FEB-2001 (first entry)
XX
DE      Human bcl genes antisense sequence #16.
XX
KW      Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
```


CC cytokines. They can be used to treat pulmonary disorders having an
CC immunologic component, such as asthma or environmentally induced airway
CC disease. They can also be used to treat diseases associated with Gram-
CC positive bacterial infections or endotoxaemia including bacterial
CC meningitis, neonatal sepsis, cystic fibrosis, inflammatory bowel disease
CC and liver cirrhosis, Gram-negative pneumonia, Gram-negative abdominal
CC abscess, haemorrhagic shock, disseminated intravascular coagulation, or
CC an inflammatory response to lipopolysaccharide
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
|||||

RESULT 75
AAV28181/c
ID AAV28181 standard; DNA; 18 BP.
AC
XX
XX AAV28181;
DT 08-OCT-1998 (first entry)
DE Antisense oligonucleotide to bcl-2 mRNA.
XX
XX Purification; oligonucleotide; matrix; affinity unit;
XX affinity purification; antisense; bcl-2; ss.
XX
XX Synthetic.
XX
XX WO9827425-A1.
PN
XX
XX 25-JUN-1998.
PD
XX
XX 18-DEC-1997; 97WO-US023284.
PF
XX
XX 19-DEC-1996; 96US-00769951.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Chen D, Srivatsa GS, Cole DL;
PI
XX WPI; 1998-362922/31.
DR
XX Matrix for selective separation of oligo:nucleotide - useful for, e.g.
PT large scale purification of anti-sense agents from their deletion
PT derivatives formed during synthesis.
XX
XX Disclosure; Page 86; 183pp; English.
PS
XX AAV28155-268 represent oligonucleotides which can be purified using the
CC method of the invention. The specification describes a matrix that
CC comprises a support and an affinity unit that specifically and reversibly
CC binds a target oligonucleotide, and comprises a sequence of bases having
CC the reverse complement of a hybridising portion of the target
CC oligonucleotide. The matrix is used for affinity purification of
CC synthetic oligonucleotides, specifically antisense agents, for treatment
CC of hyperproliferative diseases, for treating a non-pathogen, non-
CC hyperproliferative disease, e.g. Alzheimer's, for modulating expression
CC of cell surface proteins, and to inhibit a eukaryotic pathogen,
CC retrovirus or other viruses
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
|||||

RESULT 76
AAV27719/c
ID AAV27719 standard; DNA; 18 BP.
AC
XX
XX AAV27719;
DT 01-OCT-1998 (first entry)
DE Immunostimulatory oligodeoxyribonucleotide of the invention.
XX
XX Immunostimulatory; oligodeoxyribonucleotide; ODN;
KW unmethylated CpG dinucleotide; activate; lymphocyte; immune response;
KW Th2; Th1; cytokine; treatment; prevention; asthma; autoimmune disease;
KW desensitisation therapy; artificial adjuvant; antibody generation; ss.
XX
XX Synthetic.
XX
XX WO9818810-A1.
PN
XX
XX 07-MAY-1998.
PD
XX
XX 30-OCT-1997; 97WO-US019791.
PF
XX
XX 30-OCT-1996; 96US-00738652.
PR
XX (IOWA) UNIV IOWA RES FOUND.
PA
XX Krieg AM, Kline JN;
PI
XX WPI; 1998-272127/24.
DR
XX New immunostimulatory nucleic acid molecules - which contain at least one
PT unmethylated CpG dinucleotide, used for treating e.g. tumours, infections
PT or autoimmune disease.
XX
XX Disclosure; Page 49; 109pp; English.
PS
XX AAV27641-751 represent immunostimulatory oligodeoxyribonucleotides (ODNs)
CC of the invention. The ODNs contain at least one unmethylated CpG
CC dinucleotide, and have the formula: 5' N1X1GX2N2 3', where at least one
CC nucleotide separates consecutive CpGs, X1 is adenine, guanine, or
CC thymine, X2 is cytosine or thymine, N is any nucleotide and N1-N2 is 0-26
CC bases with the provision that N1 and N2 does not contain a CCGG tetramer
CC or more than one CCG or CGG trimer OR 5' NX1X2GX3X4N 3', where at least
CC one nucleotide separates consecutive CpGs, X1 and X2 are selected from
CC GpT, GpG, GpA, ApT and ApA, X3 and X4 are selected from TpT or CpT, N is
CC any nucleotide and N1-N2 is 0-26 bases with the provision that N1 and N2
CC does not contain a CCGG tetramer or more than one CCG or CGG trimer. The
CC ODNs activate lymphocytes in a subject and redirect a subject's immune
CC response from a Th2 to a Th1 (e.g. by inducing monocytic cells and other
CC cells to produce Th1 cytokines, including IL-12, IFN-gamma and GM-CSF).
CC The ODNs can be used to treat or prevent an asthmatic disorder.
CC autoimmune diseases, in desensitisation therapy, as an artificial
CC adjuvant during antibody generation in a mammal such as a mouse or a
CC human
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
|||||

RESULT 77

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AAV19667/c
ID AAV19667 standard; DNA; 18 BP.
XX AC
XX AAV19667;
XX AC
XX 25-MAR-2003 (revised)
DT 12-JUN-1998 (first entry)
XX DT
XX Human bcl-2 antisense oligonucleotide 13.
XX DE
XX Antisense oligonucleotide; bcl-2 gene; lymphoma; leukaemia; human;
KW cancer; ss.
XX KW
XX Synthetic.
OS Homo sapiens.
XX OS
XX US5734033-A.
PN 31-MAR-1998.
XX PN
XX 24-MAR-1994; 94US-00217082.
XX PD
XX 22-DEC-1988; 88US-00288692.
XX PF
XX 21-FEB-1992; 92US-00840716.
XX PR
XX (UYPE-) UNIV PENNSYLVANIA.
XX PA
XX Reed J;
XX PI
XX WPI; 1998-229881/20.
XX DR
XX Anti-sense oligo:nucleotide(s) complementary to BCL-2 mRNA - useful for
XX PT treating cancers, e.g. lymphoma(s) and some leukaemia(s).
XX PT
XX Disclosure; Col 23; 21pp; English.
XX PS
XX This antisense oligonucleotide is complementary to the translation
XX CC initiation site of the human bcl-2 mRNA. The Bcl-2 antisense
XX CC oligonucleotides are phosphorothioate derivatives and can straddle
XX CC strategic sites such as the translation initiation site, donor and
XX CC acceptor splicing sites, or sites for transportation or degradation.
XX CC Blocking translation at such strategic sites prevents the formation of a
XX CC functional bcl-2 gene product. These oligonucleotides may be used for
XX CC treating cancers associated with high levels of bcl-2 gene expression,
XX CC especially lymphomas and some leukaemias. (Updated on 25-MAR-2003 to
XX CC correct PF field.)
XX CC
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGCGGCACGCTGGAGA 18
Db 18 ATGCGGCACGCTGGAGA 1

RESULT 78
AAZ41948/c
ID AAZ41948 standard; DNA; 18 BP.
XX ID
XX AAZ41948;
XX AC
XX 24-JAN-2000 (first entry)
XX DT
XX IL-12 secretion inducing CpG oligonucleotide 93.
XX DE
XX CpG oligonucleotide; phosphorothioate; interleukin-12; IL-12; secretion;
KW human PBMC; immune response; cancer; HIV; bacterial disease; asthma;
KW neoplastic disorder; jaagsiekte; B cell; NK cell; ss; cytokine;
KW antigen presenting cell; infection; allergic disease.
XX KW
XX

AAV19667/c
ID AAV19667 standard; DNA; 18 BP.
XX AC
XX AAV19667;
XX AC
XX 25-MAR-2003 (revised)
DT 12-JUN-1998 (first entry)
XX DT
XX Human bcl-2 antisense oligonucleotide 13.
XX DE
XX Antisense oligonucleotide; bcl-2 gene; lymphoma; leukaemia; human;
KW cancer; ss.
XX KW
XX Synthetic.
OS Homo sapiens.
XX OS
XX US5734033-A.
PN 31-MAR-1998.
XX PN
XX 24-MAR-1994; 94US-00217082.
XX PD
XX 22-DEC-1988; 88US-00288692.
XX PF
XX 21-FEB-1992; 92US-00840716.
XX PR
XX (UYPE-) UNIV PENNSYLVANIA.
XX PA
XX Reed J;
XX PI
XX WPI; 1998-229881/20.
XX DR
XX Anti-sense oligo:nucleotide(s) complementary to BCL-2 mRNA - useful for
XX PT treating cancers, e.g. lymphoma(s) and some leukaemia(s).
XX PT
XX Disclosure; Col 23; 21pp; English.
XX PS
XX This antisense oligonucleotide is complementary to the translation
XX CC initiation site of the human bcl-2 mRNA. The Bcl-2 antisense
XX CC oligonucleotides are phosphorothioate derivatives and can straddle
XX CC strategic sites such as the translation initiation site, donor and
XX CC acceptor splicing sites, or sites for transportation or degradation.
XX CC Blocking translation at such strategic sites prevents the formation of a
XX CC functional bcl-2 gene product. These oligonucleotides may be used for
XX CC treating cancers associated with high levels of bcl-2 gene expression,
XX CC especially lymphomas and some leukaemias. (Updated on 25-MAR-2003 to
XX CC correct PF field.)
XX CC
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGCGGCACGCTGGAGA 18
Db 18 ATGCGGCACGCTGGAGA 1

RESULT 79
AAZ41905/c
ID AAZ41905 standard; DNA; 18 BP.
XX ID
XX AAZ41905;
XX AC
XX 24-JAN-2000 (first entry)
XX DT
XX IL-12 secretion inducing CpG oligonucleotide 50.
XX DE
XX CpG oligonucleotide; phosphorothioate; interleukin-12; IL-12; secretion;
KW human PBMC; immune response; cancer; HIV; bacterial disease; asthma;
KW neoplastic disorder; jaagsiekte; B cell; NK cell; ss; cytokine;
KW antigen presenting cell; infection; allergic disease.
XX KW
XX

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OS Synthetic.
XX WO9951259-A2.
XX 14-OCT-1999.
XX
XX 02-APR-1999; 99WO-US007335.
XX PF
XX 03-APR-1998; 98US-0080729P.
XX PR
XX (IOWA ) UNIV IOWA RES FOUND.
XX PA
XX Krieg AM, Weiner G;
XX PI
XX WPI; 1999-620169/53.
XX DR
XX Novel synergistic combinations of immunostimulatory oligonucleotides and
XX immunopotentiating cytokines are useful for stimulating the immune
XX system.
XX
XX Example 8; Page 80; 91pp; English.
XX
XX Sequences AAZ41856-241949 are phosphorothioate CpG oligonucleotides which
XX are used in the invention to induce interleukin-12 (IL-12) secretion from
XX human PBMC. The invention comprises stimulating an immune response in a
XX subject comprising administering to a subject exposed to an antigen, an
XX immunopotentiating cytokine and an immunostimulatory CpG oligonucleotide
XX to induce a synergistic antigen specific immune response. The methods are
XX useful for treating cancer by stimulating an antigen specific immune
XX response against a cancer antigen. The methods can also be used to treat
XX neoplastic disorders in humans, including but not limited to: sarcoma,
XX carcinoma, fibroma, lymphoma, melanoma, neuroblastoma, retinoblastoma,
XX and glioma. The methods are also useful for treating infectious diseases,
XX e.g. viral diseases such as HIV, bacterial diseases, and fungal diseases.
XX The methods may also be used to treat allergic diseases, e.g. asthma. The
XX methods and compositions may also be applied to treat cancer and tumours
XX in non human subjects, e.g. cats and dogs. Neoplasias affecting
XX agricultural livestock may also be treated and include leukaemia,
XX haemangioepithelioma and bovine ocular neoplasia. Chronic, infectious,
XX contagious diseases of sheep and goats caused by the bacterium
XX Corynebacterium pseudotuberculosis, and contagious lung tumour of sheep
XX caused by jaagsiekte may also be treated. CpG oligonucleotides can be
XX useful in activating B cells, NK cells, and antigen presenting cells,
XX such as monocytes and macrophages. CpG oligonucleotides enhance antibody
XX dependent cellular cytotoxicity and can be used as an adjuvant in
XX conjunction with tumour antigens to protect against a tumour challenge
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 ATGGCGCACGCTGGGAGA 18
XX | | | | | | | | | | | | | |
XX Db 18 ATGGCGCACGCTGGGAGA 1
XX
XX RESULT 80
XX AAX78803/c
XX ID AAX78803 standard; DNA; 18 BP.
XX
XX AC AAX78803;
XX
XX DT 06-SEP-1999 (first entry)
XX
XX DE HPV fusion protein CpG oligonucleotide 2.
XX
XX Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour;
XX immunological fusion partner; CpG oligonucleotide; immune response;
XX HPV antigen; prevention; treatment; primer; ss.
XX
XX OS Synthetic.
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```
OS Human papillomavirus.
XX WO9933868-A2.
XX 08-JUL-1999.
XX
XX 18-DEC-1998; 98WO-EP008563.
XX PF
XX 24-DEC-1997; 97GB-00027262.
XX PR
XX (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
XX PA
XX Dalemans WLJ, Gerard CMG;
XX PI
XX WPI; 1999-405485/34.
XX DR
XX Composition comprising an E6, E7 or E6/E7 fusion protein from HPV to
XX induce immune response to HPV.
XX PT
XX Claim 11; Page 37; 62pp; English.
XX PS
XX AAX78791-X78801 represent nucleic acid sequences which encode novel
XX constructs comprising an E6 or E7 protein or E6/E7 fusion protein from
XX HPV (represented in AAY25375-Y25386). These constructs are optionally
XX linked to an immunological fusion partner and an immunomodulatory CpG
XX oligonucleotide. The products of the invention can be used to induce an
XX immune response in a patient to an HPV antigen. They can also be used for
XX preventing or treating HPV induced tumours. This sequence represents a
XX CpG oligonucleotide which is used in the method of the invention
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 ATGGCGCACGCTGGGAGA 18
XX | | | | | | | | | | | | | |
XX Db 18 ATGGCGCACGCTGGGAGA 1
XX
XX RESULT 81
XX AAV99434/c
XX ID AAV99434 standard; DNA; 18 BP.
XX
XX AC AAV99434;
XX
XX DT 22-MAR-1999 (first entry)
XX
XX DE Antisense oligonucleotide directed against human bcl-2 gene.
XX
XX KW Antisense oligonucleotide; human bcl-2 gene; phosphorothioate;
XX phosphodiester; lipid-encapsulation; tumour; aberrant gene expression;
XX treatment; inflammation; infection; ss.
XX
XX OS Synthetic.
XX OS Homo sapiens.
XX
XX PH Key Location/Qualifiers
XX FT modified_base 1..18
XX FT /tag= a
XX FT /note= "phosphorothioate or phosphodiester bonds"
XX
XX PN WO9851278-A2.
XX
XX PD -19-NOV-1998.
XX
XX PF 14-MAY-1998; 98WO-CA000485.
XX
XX PR 14-MAY-1997; 97US-00856374.
XX
XX PA (INEX-) INEX PHARM CORP.
XX
XX OS
```

PI Sample SC, Klimuk SK, Harasym T, Hope MJ, Ansell SM, Cullis P;
 PI Scherrer P, Debeyer D;
 XX WPI; 1999-045179/04.
 XX Composition containing lipid-encapsulated therapeutic agent - useful,
 PT e.g. for delivering antisense molecules or ribozymes or treating diseases
 PT associated with aberrant gene expression.
 XX Disclosure; Page 23; 98pp; English.
 XX The present sequence represents an antisense oligonucleotide directed
 CC against the human bcl-2 gene. The oligonucleotide can have either
 CC phosphorothioate or phosphodiester bonds. The oligonucleotide is lipid-
 CC encapsulated using the method of the invention. A composition comprising
 CC lipid-encapsulated particles of a therapeutic agent, e.g. antisense
 CC oligonucleotides, is prepared by mixing at least 2 lipids with buffered
 CC aqueous solution of charged therapeutic agent to form an intermediate
 CC mixture of lipid-encapsulated particles, and changing the pH of the
 CC mixture to neutralise at least some of the external surface charges on
 CC the particles. One lipid has a (de)protonatable group with Ka such that
 CC the lipid is charged at a first pH but neutral at a second pH
 CC (particularly near physiological pH) and the buffer maintains this lipid
 CC in the charged form (i.e. cationic when the therapeutic agent is anionic
 CC in the buffer, or vice versa). The second lipid prevents particle
 CC aggregation during formation of the lipid-therapeutic agent particles.
 CC The composition is used to introduce therapeutic agents into cells, in
 CC vivo or in vitro, particularly to treat or prevent diseases associated
 CC with aberrant gene expression in mammals, specifically tumours,
 CC inflammation or infection
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 |||||
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 82
 AAZ31944/C
 ID AAZ31944 standard; DNA; 18 BP.
 XX AAZ31944;
 XX 26-JAN-2000 (first entry)
 DT CpG adjuvant oligo 1002.
 XX CpG adjuvant; vaccine; polyoxyethylene ether; polyoxyethylene ester;
 XX antigen; infection; allergy; cancer; therapy; ss.
 XX Synthetic.
 OS WO952549-A1.
 PN 21-OCT-1999.
 PD 29-MAR-1999; 99WO-EP002278.
 XX 09-APR-1998; 98GB-00007805.
 XX 25-SEP-1998; 98GB-00020956.
 XX (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
 XX Friede M, Hermand P;
 PI WPI; 1999-620290/53.
 XX Vaccine to protect against infections, allergy and cancer.

XX Example 9; Page 26; 52pp; English.
 XX This sequence represents a CpG adjuvant that can be used in the vaccine
 CC composition of the invention. The vaccine comprises a polyoxyethylene
 CC ether or ester (I), not in the form of a vesicle, pharmaceutically
 CC acceptable excipient and an antigen (Ag) or antigenic composition. The
 CC vaccine can be used to treat or prevent infections (by bacteria, viruses
 CC or other parasites), allergy and cancer. (I), which are safe, easy to
 CC sterilize and simple to administer, are powerful vaccine adjuvants, able
 CC to induce a systemic immune response when administered (non-invasively)
 CC to the mucosa. The response is at least as good as that from conventional
 CC systemic injection. (I) are effective at low concentration, have low
 CC reactogenicity and are well tolerated
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 |||||
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 83
 AAAX27536
 ID AAAX27536 standard; RNA; 18 BP.
 XX AAAX27536;
 XX 27-MAY-1999 (first entry)
 DT Synthetic RNA sequence produced by the method of the invention.
 DE Silyloxymethyl; phosphonate; silyloxymethyl halide; diagnosis; ss;
 XX cyanoethyl phosphoramidate coupling; isomerisation; steric hindrance.
 KW Synthetic.
 OS WO9903044-A1.
 PN 25-FEB-1999.
 PD 17-AUG-1998; 98WO-EP005215.
 XX 18-AUG-1997; 97CH-00001931.
 PR (PITS/) PITSCH S.
 XX (WEIS/) WEISS P A.
 PA (JENN/) JENNY L.
 XX Pitsch S, Weiss PA, Jenny L;
 FI WPI; 1999-180963/15.
 DR 2-Silyloxymethyl ribonucleosides and their phosphonate derivatives - have
 XX high purity, use in machine synthesis of ribonucleic acids, enable longer
 PT oligonucleotide chain construction, and larger amounts.
 XX Example 7; Page 26; 38pp; English.
 XX The invention relates to silyloxymethyl protected D- or L-ribonucleosides
 CC and their phosphonates (I), and silyloxymethyl halides (II). (I) are
 CC intermediates for synthesis of RNA-oligonucleotides with predetermined
 CC nucleotide sequence, particularly by machine synthesis. The groups
 CC specified above, apart from those on silyl, are those particularly for
 CC the cyanoethyl phosphoramidate coupling. Uses of the oligonucleotide
 CC products in diagnosis, therapy, and as research tools, are well known,
 CC and are not dealt with in detail. (II) is an intermediate for (I). The
 CC silyloxymethyl halide reagent is easy to prepare, and yields are high.
 CC Introduction of the silyloxymethyl group into the ribonucleoside is

CC simple and rapid, and the acetal bond formed does not migrate.
 CC eliminating particularly the prior art problem of 2' to 3' isomerisation.
 CC The methylenedioxy group spacer between the silyl group and nucleoside
 CC ring results in less steric hindrance than bulky direct silyloxy
 CC linkages, enabling first, a range of choices for the silyl substituents,
 CC to provide, e.g., acid or base stability; and second, higher yields in
 CC coupling. Purer products are therefore obtained than in prior art,
 CC enabling larger quantities and longer chains of oligonucleotides to
 CC be synthesised successfully, and in shorter times
 CC
 XX
 SQ Sequence 18 BP; 4 A; 4 C; 8 G; 0 T; 2 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 79;
 Matches 16; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 :|||||:|||||
 Db 1 AUGGCGCAGCTGGGAGA 18

RESULT 84
 AAX18702/c
 ID AAX18702 standard; DNA; 18 BP.

XX AAX18702;
 AC
 XX
 DT 10-MAY-1999 (first entry)
 XX

DE Target bcl-2 antisense oligonucleotide BCL-2.

XX Cellular adhesion protein; proliferation; antisense oligonucleotide;
 KW alimentary canal; transport; gastrointestinal mucosa; cancer;
 KW Alzheimer's disease; beta-thalassemia; malaria; viral infection; HIV;
 KW inflammation; SS.

XX Synthetic.

XX WO9901579-A1.

XX 14-JAN-1999.

XX 01-JUL-1998; 98WO-US013574.

XX 01-JUL-1997; 97US-00886829.

XX (ISIS-) ISIS PHARM INC.

XX Teng C, Hardee G;

XX WPI; 1999-106077/09.

XX Composition comprising nucleic acid and penetration enhancer - used
 PT particularly for delivering therapeutic antisense oligonucleotides across
 PT the gastrointestinal mucosa, provides high bioavailability.

XX Example 2; Page 86; 115pp; English.

XX A pharmaceutical composition has been developed which comprises a nucleic
 CC acid and at least one penetration enhancer. The compositions are used:
 CC (i) to treat or prevent any disease or disorder that can be treated with
 CC the nucleic acid, e.g. cancer, Alzheimer's disease, beta-thalassemia,
 CC malaria, viral infections (including human immune deficiency virus
 CC (HIV)), inflammation, in human or animal medicine; (ii) to investigate
 CC the role of a gene or gene product in non-human animals; and (iii) to
 CC modulate gene expression in cells, tissues or organs. The compositions
 CC provide bioavailability of at least 15, preferably 17-35%. The
 CC penetration enhancer improves: (i) transport of the nucleic acid across
 CC the mucosa of the alimentary canal and into cells; and (ii) increases
 CC stability of the nucleic acid. Oral administration avoids the
 CC complications and expense of intravenous or other methods of
 CC administration. AAX18669 to AAX18799 and AAX18801 represent antisense
 CC oligonucleotides which can be used as the nucleic acid in the method of

CC the invention
 XX
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 :|||||:|||||
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 85
 AAX88537/c
 ID AAX88537 standard; DNA; 18 BP.

XX AAX88537;
 AC
 XX

DT 10-SEP-1999 (first entry)

DE Cytosine-guanosine dinucleotide motif oligonucleotide #4.

XX Cytosine-guanosine dinucleotide motif; CpG; immunomodulation;
 KW unmethylated; vaccine; immunostimulation; immune response;
 KW T-independent type 1 antigen; T-independent type 2 antigen;
 KW polysaccharide conjugate antigen; ss.

XX Synthetic.

XX WO9933488-A2.

XX 08-JUL-1999.

XX 18-DEC-1998; 98WO-EP008562.

XX 24-DEC-1997; 97GB-00027262.

XX (SMK) SMITHKLINE BEECHAM BIOLOGICALS.

XX Dalemans WLJ, Laferriere CAJ, Prieels J;

XX WPI; 1999-405369/34.

XX A vaccine composition for inducing an immune response to T-independent
 PT type 1 or type 2 antigen or polysaccharide conjugate antigen.
 PT
 XX Claim 6; Page 31; 35pp; English.

XX The present invention describes a formulation (A) comprising a cytosine-
 CC guanosine dinucleotide motif (CpG) oligonucleotide and T-independent type
 CC 1 or type 2 antigens or polysaccharide conjugate antigen. The present
 CC sequence represent a specifically claimed CpG oligonucleotide. A vaccine
 CC composition comprising the formulation is used for inducing an immune
 CC response to T-independent type 1 or type 2 antigen or polysaccharide
 CC conjugate antigen. The use of immunostimulatory CpG oligonucleotide acts
 CC as an adjuvant to pneumococcal polysaccharides

XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 :|||||:|||||
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 86
 AAX33514/c
 ID AAX33514 standard; DNA; 18 BP.

XX


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OS Synthetic.
XX WO200006588-A1.
XX
XX
XX 10-FEB-2000.
XX
XX 27-JUL-1999; 99WO-US017100.
XX
XX 27-JUL-1998; 98US-0094370P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS INC.
XX
XX Krieg AM;
XX
XX WPI; 2000-195254/17.
XX
XX Immunostimulatory and immunoinhibitory stereoisomers of CpG
XX oligonucleotides useful for immunotherapy of cancer.
XX
XX Disclosure; Page 11; 88pp; English.
XX
XX AAZ60933-Z61015 represent immunostimulatory stereoisomers of CpG
XX oligonucleotides. The sequences are derived from generic nucleic acid
XX sequence, from which immunoinhibitory sequences may also be derived. The
XX immunostimulatory nucleic acids can be co-administered with an antigen to
XX induce an antigen-specific immune response. The immunostimulatory nucleic
XX acids can also be used in methods for redirecting a subject's immune
XX response from a Th2 to a Th1, for treating asthma, for desensitising a
XX subject against the occurrence of an allergic reaction in response to a
XX contact with an allergen, for activating an immune cell, especially a
XX lymphocyte or a dendritic cell expressing a cancer antigen or for
XX treating cancer. The immunoinhibitory nucleic acid can be used to prevent
XX an immune response, especially where the immune response in the subject
XX is excessive due to having received an immune stimulating compound. The
XX immunoinhibitory nucleic acid can be used to treat a subject having or at
XX risk of an inflammatory disease, especially inflammatory bowel disease,
XX autoimmune disease, gingivitis, psoriasis and sepsis
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 ATGGCGCACGCTGGGAGA 18
XX 18 ATGGCGCACGCTGGGAGA 1
XX
XX RESULT 89
XX AAZ48024/c
XX ID AAZ48024 standard; DNA; 18 BP.
XX
XX AC AAZ48024;
XX
XX 08-MAR-2000 (first entry)
XX
XX Immune remodeling inducing CpG oligonucleotide SEQ ID NO:104.
XX
XX Haematopoiesis; regulation; CpG oligonucleotide; phosphorothioate;
XX immune remodeling; thrombopoiesis; anaemia; immune system; cancer;
XX immune response; allergic reaction; infectious disease; asthma;
XX thrombocytopaenia; immunohaemolytic disorder; genetic disorder;
XX haemoglobinopathy; kidney failure; chronic inflammatory disorder;
XX rheumatoid arthritis; ss.
XX
XX Synthetic.
XX WO9958118-A2.
XX
XX 18-NOV-1999.
XX

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XX 14-MAY-1999; 99WO-IB001285.
XX
XX 14-MAY-1998; 98US-0085516P.
XX
XX 02-FEB-1999; 99US-00241653.
XX
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS INC.
XX
XX Wagner H, Lipford G;
XX
XX WPI; 2000-062261/05.
XX
XX Use of CpG containing oligonucleotides for, e.g. inducing an antigen-
XX specific immune response.
XX
XX Example 1; Page 67; 116pp; English.
XX
XX The present invention describes a method using CpG containing
XX oligonucleotides (ONs) for regulating immune system remodeling and for
XX regulating haematopoiesis. The method for inducing an antigen-specific
XX immune response comprises: (1) administering an ON having a sequence
XX including at least the formula (I); and (2) exposing the subject to an
XX antigen at least 3 days after the ON is administered to the subject to
XX produce an antigen-specific immune response: 5' X1CGX2 3' (I), where the
XX ON = includes at least 8 nucleotides; C and G = unmethylated, and X1 and
XX X2 = nucleotides. The method can be used for inducing an immune response
XX against an antigen such as cells, cell extracts, proteins,
XX polysaccharides, polysaccharide conjugates, lipids, glycolipids,
XX carbohydrate, viral extracts, viruses, bacteria, fungi, parasites and
XX allergens. It can be used in a subject at risk of developing cancer or an
XX allergic reaction. It can also be used for treating an infectious
XX disease, allergic diseases and asthma, as well as thrombocytopaenia which
XX is drug-induced, due to an autoimmune disorder such as idiopathic
XX thrombocytopenic purpura, or resulting from accidental or therapeutic
XX radiation exposure. It can also be used for treating anaemia such as drug
XX induced anaemia, immunohaemolytic disorder, genetic disorders such as
XX haemoglobinopathy and inherited haemolytic anaemia, inadequate production
XX despite adequate iron stores, chronic disease such as kidney failure, and
XX chronic inflammatory disorder such as rheumatoid arthritis, or anaemia
XX resulting from accidental or therapeutic radiation exposure. AAZ47932 to
XX AAZ48029 represent phosphorothioate CpG oligonucleotides used in the
XX exemplification of the present invention
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 ATGGCGCACGCTGGGAGA 18
XX 18 ATGGCGCACGCTGGGAGA 1
XX
XX RESULT 90
XX AAZ47981/c
XX ID AAZ47981 standard; DNA; 18 BP.
XX
XX AC AAZ47981;
XX
XX 08-MAR-2000 (first entry)
XX
XX Immune remodeling inducing CpG oligonucleotide SEQ ID NO:59.
XX
XX Haematopoiesis; regulation; CpG oligonucleotide; phosphorothioate;
XX immune remodeling; thrombopoiesis; anaemia; immune system; cancer;
XX immune response; allergic reaction; infectious disease; asthma;
XX thrombocytopaenia; immunohaemolytic disorder; genetic disorder;
XX haemoglobinopathy; kidney failure; chronic inflammatory disorder;
XX rheumatoid arthritis; ss.
XX
XX Synthetic.
XX

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PN WO9958118-A2.
 XX 18-NOV-1999.
 PD
 PF 14-MAY-1999; 99WO-IB001285.
 XX
 PR 14-MAY-1998; 98US-0085516P.
 PR 02-FEB-1999; 99US-00241653.
 XX
 PA (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.
 PA (CPGI-) CPG IMMUNOPHARMACEUTICALS INC.
 XX
 PI Wagner H, Lipford G;
 XX
 DR WPI; 2000-062261/05.
 XX
 PT Use of CpG containing oligonucleotides for, e.g. inducing an antigen-specific immune response.
 XX
 PS Example 1; Page 66; 116pp; English.
 XX
 CC The present invention describes a method using CpG containing oligonucleotides (ONs) for regulating immune system remodeling and for regulating haematopoiesis. The method for inducing an antigen-specific immune response comprises: (1) administering an ON having a sequence including at least the formula (I); and (2) exposing the subject to an antigen at least 3 days after the ON is administered to the subject to produce an antigen-specific immune response: 5' X1CGX2 3' (I), where the ON = includes at least 8 nucleotides; C and G = unmethylated, and X1 and X2 = nucleotides. The method can be used for inducing an immune response against an antigen such as cells, cell extracts, proteins, polysaccharides, polysaccharide conjugates, lipids, glycolipids, carbohydrates, viral extracts, viruses, bacteria, fungi, parasites and allergens. It can be used in a subject at risk of developing cancer or an allergic reaction. It can also be used for treating an infectious disease, allergic diseases and asthma, as well as thrombocytopaenia which is drug-induced, due to an autoimmune disorder such as idiopathic thrombocytopenic purpura, or resulting from accidental or therapeutic radiation exposure. It can also be used for treating anaemia such as drug-induced anaemia, immunohaemolytic disorder, genetic disorders such as haemoglobinopathy and inherited haemolytic anaemia, inadequate production of adequate iron stores, chronic disease such as kidney failure, and chronic inflammatory disorder such as rheumatoid arthritis, or anaemia resulting from accidental or therapeutic radiation exposure. AA247932 to AA248029 represent phosphorothioate CpG oligonucleotides used in the exemplification of the present invention
 XX
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 DB 18 ATGGCGCAGCTGGGAGA 1
 RESULT 91
 AAA14470/c
 ID AAA14470 standard; DNA; 18 BP.
 XX
 AC AAA14470;
 XX
 DT 21-AUG-2000 (first entry)
 XX
 DE Phosphorothioate oligonucleotide.
 XX
 KW Immunostimulatory oligonucleotide; adjuvant; mucosal immunity;
 KW secretory immunoglobulin A production; sIgA; Th1 phenotype;
 KW toxicity study; BCL-2; human; ds.
 XX
 OS Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1..18
 FT /*tag= a
 FT /note= "Phosphorothioate linkages"
 XX
 PN WO200020039-A1.
 XX 13-APR-2000.
 PD
 XX 15-SEP-1999; 99WO-US021203.
 PF
 XX 05-OCT-1998; 98US-00167039.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA
 XX Raz E, Horner AA, Carson DA;
 PI WPI; 2000-303647/26.
 XX
 DR
 XX Immunostimulatory oligonucleotide adjuvant induces mucosal immunity to an antigen in a mammalian host through production of secretory immunoglobulin A.
 PT
 PS Example 5; Page 26; 64pp; English.
 XX
 CC The invention relates to a method of inducing mucosal immunity to an antigen in a mammalian host, including the production of secretory immunoglobulin A (sIgA). Immune protection in the mucosa (the principal site of entry of most foreign antigens) is mediated by mucosa-associated lymphoid tissue, epithelial and distinct B-cell, T-cell and accessory cell sub-populations. The primary immune response which characterises the induction of mucosal immunity to an antigen is sIgA production by activated B-cells. The method comprises introducing an immunostimulatory oligonucleotide (ISS-ODN) and the antigen into host mucosa, where the ISS-ODN includes a core nucleotide sequence. The core nucleotide sequence is 5'-Purine-Purine-C-G-Pyrimidine-Pyrimidine-3', specific examples of which are AACGTT, AGCGTC and GACGTT (SEQ ID NOS 1-3). A specific example of an ISS-ODN is DY1018 (AAA14467). The ISS-ODN is used as an adjuvant with an antigen for stimulating mucosal immunity. The level of sIgA production induced in the host is at least 3 times the magnitude of sIgA production achievable in response to introduction of antigen alone into the mucosal tissue and is equivalent or greater than the magnitude of sIgA production achievable in response to introduction of the antigen and cholera toxin adjuvant into the mucosal tissue. The host immune response is stimulated to antigen specific IgA production, biased towards the Th1 phenotype while antigen-induced IgE production is avoided. The adjuvant has little or no known toxicity in mammals and its efficacy is comparable to that of cholera toxin which is used as a mucosal adjuvant. The present sequence represents a human BCL-2 phosphorothioate oligonucleotide previously used in toxicity studies in humans. The study indicates that the ISS-ODNs of the invention should not cause significant toxicity
 XX
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 DB 18 ATGGCGCAGCTGGGAGA 1
 RESULT 92
 AA287997/c
 ID AA287997 standard; DNA; 18 BP.
 XX
 AC AA287997;
 XX
 DT 31-MAY-2000 (first entry)
 XX
 DE BTE-labeled oligonucleotide.

```

XX Fluorescence; dibenzazole derivative; enzyme detection;
KW fluorescent acid-base indicator; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1 /*tag= a
FT /*note= "BBTE-labeled"
FT
XX
XX W0200004007-A1.
XX
XX 27-JAN-2000.
XX
XX 16-JUL-1999; 99WO-US016123.
XX
XX 17-JUL-1998; 98US-00118220.
XX
XX 21-JUL-1998; 98WO-US015080.
XX
XX (PROM-) PROMEGA BIOSCIENCES INC.
XX
XX Brown LR, Xu C;
XX
XX WPI; 2000-237208/20.
XX
XX New fluorescent dibenzazole derivatives useful as acid-base indicators or
XX in biological assays, e.g., for detection of enzymes, DNA or antibodies
XX in samples.
XX
XX Example 11; Page 31; 52pp; English.
XX
XX The invention provides fluorescent dibenzazole derivatives of specified
XX formulae. The derivatives are fluorescent compounds which may be used for
XX detection of agents in samples. They may be used, e.g., for detection of
XX enzymes in biological samples. Detection of antibodies to specific
XX analytes conjugated with appropriate enzymes, or detection of protein,
XX DNA or RNA samples directly or indirectly with enzymes using gels and
XX membranes for separation and visualization. Typically, the compound is
XX added to a biological sample and the hydrolysis of the compound is
XX detected by fluorescence. They can also be used as fluorescent acid-base
XX indicators. The derivatives are stable in a variety of aqueous
XX environments, and have solubility characteristics suitable for various
XX applications. They can be used at a variety of pH ranges. They are easily
XX detectable above background interference, and exhibit large Stokes'
XX shifts. The present sequence represents a labeled oligonucleotide used in
XX the course of the invention.
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 ATGGCGCACGCTGGGAGA 18
XX 18 ATGGCGCACGCTGGGAGA 1
XX
XX Db
XX
XX RESULT 93
XX AAZ46800
XX ID AAZ46800 standard; DNA; 18 BP.
XX
XX AC AAZ46800;
XX
XX 31-MAR-2000 (first entry)
XX
XX Human Bcl-2 gene amplifying forward primer.
XX
XX Progesterone; transdermal; cancer; breast cancer; plasma; human;
XX cytostatic; Bcl-2 gene; PCR primer; ss.
XX
XX Homo sapiens.
XX

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XX W09959595-A1.
XX
XX 25-NOV-1999.
XX
XX 18-MAY-1999; 99WO-US011002.
XX
XX 20-MAY-1998; 98US-00081869.
XX
XX (WILEY/) WILEY T S.
XX (FORM/) FORMBY B.
XX
XX Wiley TS, Formby B;
XX
XX WPI; 2000-105568/09.
XX
XX Composition for treating and preventing breast cancer.
XX
XX Disclosure; Page 8; 23pp; English.
XX
XX The invention provides a composition comprising exogenous natural
XX progesterone suitable for transdermal delivery and maintaining the plasma
XX concentration of natural progesterone above 10 ng/ml. The composition is
XX applied topically for treating or preventing cancer in a patient whose
XX plasma natural progesterone level is less than 10 ng/ml. The composition
XX and method are useful for treating breast cancer by regulating the
XX natural progesterone level in person's plasma. Prevention of cancer can
XX also be secured. Progesterone application also exhibit protection or
XX therapeutic activity in management of other forms of cancer. Sequences
XX AAZ46800-801 represents PCR primers for amplifying the human Bcl-2 gene
XX
XX Sequence 18 BP; 2 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 264 GGTGCCACCTGTGTGCCA 281
XX 1 GGTGCCACCTGTGTGCCA 18
XX
XX Db
XX
XX RESULT 94
XX AAZ47850/C
XX ID AAZ47850 standard; DNA; 18 BP.
XX
XX AC AAZ47850;
XX
XX 07-MAR-2000 (first entry)
XX
XX Immunostimulatory oligonucleotide sequence SEQ ID NO:51.
XX
XX Mucosal immunity; immunostimulatory; CpG motif; immune response; antigen;
XX allergic reaction; cancer; infectious disease; asthma; eczema;
XX allergic rhinitis; coryza; hay fever; conjunctivitis; bronchial asthma;
XX urticaria; food allergy; atopic condition; mucosal delivery; ss.
XX
XX Synthetic.
XX
XX WO9961056-A2.
XX
XX 02-DEC-1999.
XX
XX 21-MAY-1999; 99WO-US011359.
XX
XX 22-MAY-1998; 98US-0086393P.
XX
XX (LOEB-) LOEB HEALTH RES INST AT OTTAWA HOSPITAL.
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS INC.
XX
XX McCluskie MJ, Davis HL;
XX
XX WPI; 2000-062585/05.
XX

```

XX Use of CG containing oligonucleotides as adjuvants for inducing an immune
PT response.
XX
PS Disclosure; Page 25; 116pp; English.
XX
CC The present invention describes a method using CpG containing
CC oligonucleotides (ONs) as adjuvants for inducing an immune response. The
CC method for inducing a mucosal immune response (MIR) comprises: (1)
CC administering to a mucosal surface of a subject an ON, having a sequence
CC including at least the formula (I); and (2) exposing the subject to an
CC antigen to induce the MIR, where the antigen is not encoded in a nucleic
CC acid vector: 5'X1X2CGX3X43' (I), where C and G = unmethylated, and X1,
CC X2, X3 and X4 = nucleotides. The method can be used for treating a
CC subject at risk of developing an allergic reaction, cancer or infectious
CC disease. It can be used for treating asthmatic subjects, eczema, allergic
CC rhinitis or coryza, hay fever, conjunctivitis, bronchial asthma,
CC urticaria, food allergies or other atopic conditions. The antigen may be
CC derived from infectious organisms such as infectious bacteria, viruses,
CC parasites or fungi. It can be used in humans or animals, e.g. bovine,
CC equine, feline, swine, aquatic or avian species. The ONs act as potent
CC mucosal adjuvants to induce immune responses at both local and remote
CC sites against an antigen administered to the mucosal tissue. Both
CC systemic and mucosal immunity are induced by mucosal delivery of the ONs.
CC AA247808 to AA247891 represent examples of immunostimulatory
CC oligonucleotides given in the present invention
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
RESULT 95
AAA38517/c
ID AAA38517 standard; DNA; 18 BP.
XX
AC AAA38517;
XX
XX 29-AUG-2000 (first entry)
DT
DE
XX
XX Oligonucleotide used to make DNA/topotecan liposomal complexes.
XX
XX Camptothecin; lactone form; chemotherapy; drug delivery; topotecan; TPT;
XX Hycamtin; liposome; oligonucleotide; drug complex; anticancer;
XX topoisomerase inhibitor; gene therapy; ds.
XX
XX Unidentified.
XX
XX WO200021370-A1.
XX
XX 20-APR-2000.
XX
XX 14-OCT-1998; 98WO-US020941.
XX
XX 14-OCT-1998; 98WO-US020941.
XX
XX (KENT) UNIV KENTUCKY RES FOUND.
XX
XX Yang D, Demir AS, Chavan AJ, Burke TG;
XX WPI; 2000-329047/28.
XX
XX New chemotherapeutic compositions comprising an oligonucleotide-
XX camptothecin drug complex, useful for treating cancers in a combination
XX therapy.
XX
XX Example 3; Page 65; 87pp; English.

XX The invention relates to a novel chemotherapeutic composition comprising
CC an oligonucleotide-camptothecin drug complex. The complex incorporates
CC the active lactone form of a camptothecin drug, and the camptothecin
CC dissociates from the oligonucleotide within the cell to exert its
CC therapeutic activities. Camptothecin family compounds are anticancer
CC drugs which function by inhibiting topoisomerase I (TopoI), thus
CC inhibiting DNA replication. The compositions containing the
CC oligonucleotide-camptothecin complex, which may be incorporated into a
CC viral or a non-viral vector, are used for combined gene and camptothecin
CC drug therapy in the treatment of cancer. The oligonucleotide can bind
CC selectively the lactone forms of camptothecins, conserving the agents in
CC their biologically active lactone forms. The compositions are stabilised
CC over a wide pH range and can provide for the controlled, targeted and
CC stable delivery of a camptothecin drug to target tissue. In addition to
CC stabilising camptothecin, the oligonucleotides carried in the vectors can
CC serve an additional role as gene therapy agents. This may augment the
CC effects of camptothecin on the host target tissue. The present sequence
CC represents an oligonucleotide of unknown origin used in an
CC exemplification of the invention. This oligonucleotide was complexed with
CC the camptothecin anticancer drug topotecan (TPT, Hycamtin) and
CC encapsulated in liposomes
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
RESULT 96
AAA90450/c
ID AAA90450 standard; DNA; 18 BP.
XX
AC AAA90450;
XX
XX 10-JAN-2001 (first entry)
DT
DE
XX
XX CpG adjuvant oligonucleotide, SEQ ID NO:4.
XX
XX CpG oligonucleotide; CpG motif; adjuvant; microdroplet emulsion;
XX microemulsion; adsorbent microparticle; vaccine; Th1 immune response;
XX viral infection; bacterial infection; parasitic infection; HCV; HBV;
XX hepatitis C virus; hepatitis B virus; herpes simplex virus; HSV; HIV;
XX human immunodeficiency virus; cytomegalovirus; CMV; influenza virus;
XX rabies virus; cholera; diphtheria; tetanus; pertussis;
XX Helicobacter pylori; Haemophilus influenzae; malaria; ss.
XX
XX Synthetic.
XX
XX WO2000050006-A2.
XX
XX 31-AUG-2000.
XX
XX 09-FEB-2000; 2000WO-US003331.
XX
XX 26-FEB-1999; 99US-0121858P.
XX
XX 29-JUL-1999; 99US-0146391P.
XX
XX 28-OCT-1999; 99US-0161957P.
XX
XX (CHIR) CHIRON CORP.
XX
XX O'hagan D, Ott GS, Donnelly J, Kazzaz J, Ugozzoli M, Singh M;
XX Parackman J;
XX
XX WPI; 2000-587123/55.
XX
XX Microemulsion having an adsorbent surface comprising a microdroplet
XX emulsion consisting of a metabolizable oil and an emulsifying agent which

PT is a detergent, useful as a vaccine to treat bacterial, viral, and
PT parasitic infection.
XX
PS Claim 17; Page 40; 95pp; English.
XX
CC The invention relates to a microdroplet emulsion (microemulsion) with an
CC adsorbent surface, and which comprises a metabolisable oil and an
CC emulsifying agent (a detergent). It also relates to a composition
CC comprising the microemulsion and a microparticle with an adsorbent
CC surface, where the microparticle comprises a polymer selected from a
CC poly(alpha-hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone,
CC a polyorthoester, a polyanhydride, and a polycyanocrylate, and a second
CC detergent. The surface of the microparticles efficiently adsorb
CC biologically active macromolecules such as DNA, polypeptides, antigens,
CC hormones, pharmaceuticals, enzymes, mediators of transcription or
CC translation, metabolic intermediates and adjuvants. Additionally, a
CC second biologically active molecule may be encapsulated within the
CC microparticle. The microemulsion can be used in methods of immunising a
CC host animal, particularly a human, against a viral, bacterial or
CC parasitic infection, and in methods of increasing a T_H immune response.
CC The microemulsions (having the appropriate antigens adsorbed) may be
CC particularly used as vaccines for hepatitis C virus (HCV), hepatitis B
CC virus (HBV), herpes simplex virus (HSV), human immunodeficiency virus
CC (HIV), cytomegalovirus (CMV), influenza virus, and rabies virus; the
CC bacteria which cause cholera, diphtheria, tetanus and pertussis;
CC Helicobacter pylori and Haemophilus influenzae; and malaria-causing
CC parasites. Sequences AAA90447-A90467 represent the lymphocyte stimulating
CC oligonucleotides containing at least one CpG motif which are claimed for
CC use as adjuvants in the compositions of the invention
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 97
AAZ99003/c
ID AAZ99003 standard; DNA; 18 BP.
XX
AC AAZ99003;
XX
DT 21-JUN-2000 (first entry)
XX
DE CpG motif for immunostimulatory oligonucleotide 1758.
XX
KW Immunoprotective; vaccine; antigen; saponin adjuvant; immune response;
KW immunostimulatory oligonucleotide; unmethylated CpG dinucleotide; mammal;
KW human; animal; ss.
XX
OS Synthetic.
XX
FN WO200009159-A1.
XX
PD 24-FEB-2000.
XX
PF 06-AUG-1999; 93WO-US017956.
XX
PR 10-AUG-1998; 98US-0095913P.
PR 08-APR-1999; 98US-0128608P.
XX
PA (AQUIL-) AQUILA BIOPHARMACEUTICALS INC.
XX
PI Kensil CA;
XX
DR WPI; 2000-224181/19.
XX
XX A vaccine composition comprising an antigen, saponin adjuvant and
PT

PT immunostimulatory CpG oligonucleotide, useful for stimulating immunity
PT and increasing immune responses.
XX
PS Claim 10; Page 19; 38pp; English.
XX
CC The invention relates to a vaccine composition comprising an antigen, a
CC saponin adjuvant and an immunostimulatory oligonucleotide. The
CC immunostimulatory oligonucleotide preferably comprises at least one
CC unmethylated CpG dinucleotide. This sequence represents an example of the
CC immunostimulatory oligonucleotide. The vaccine composition increases the
CC immune response to the antigen when administered to a mammal, especially
CC a human or animal. It further stimulates immunity and especially enhances
CC antibody production to the antigen, preferably in a positive synergistic
CC manner. It further enhances cell-mediated immunity. The immune adjuvant
CC in particular can be used to increase the immune response to an antigen
CC in an individual or a test system
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 98
AAZ98660/c
ID AAZ98660 standard; DNA; 18 BP.
XX
AC AAZ98660;
XX
DT 05-JUN-2000 (first entry)
XX
DE Human Bcl-2 therapeutic antisense oligonucleotide sequence Bcl-2.
XX
KW Antisense oligonucleotide; phosphorothioate; inflammatory disease; Bcl-2;
KW tumour; gene therapy; aberrant gene expression; treatment;
KW infectious disease; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT misc_feature 1..18
FT /tag= a
FT /note= "Optionally phosphorothioate internucleotide
FT linkages"
XX
PN CA2271582-A1.
XX
XX 14-NOV-1999.
XX
XX 13-MAY-1999; 99CA-02271582.
XX
XX 14-MAY-1998; 98US-00078955.
XX
XX (KLIM/) KLIMUK S K.
XX (HARA/) HARASYM T.
XX (HOPE/) HOPE M J.
XX (ANSE/) ANSELL S M.
XX (CULL/) CULLIS P R.
XX (MOKW/) MOK W W K.
XX (SCHE/) SCHERRER P.
XX (SEMP/) SEMPLE S C.
XX
XX Klimuk SK, Harasym T, Hope MJ, Ansell SM, Cullis PR, Mok WWK;
PI Scherrer P, Semple SC;
XX
XX WPI; 2000-225058/20.
XX
XX A method for delivering antisense oligonucleotides to cells using lipid

PT capsules comprising steric barrier lipids.
 XX Disclosure; Page 26; 99pp; English.
 XX This sequence represents an antisense oligonucleotide sequence which has
 CC human Bcl-2 as its target gene. The oligonucleotide is used in a method
 CC for delivering lipid encapsulated therapeutic agents (i.e. antisense
 CC oligonucleotides) to mammals. The lipid capsule comprises steric barrier
 CC lipids that prevent particle aggregation during lipid nucleic acid
 CC formation. The method may be used for the delivery of therapeutic agents
 CC to mammalian cells. It is especially suitable for delivering nucleic acid
 CC molecules, and in particular antisense molecules which may be
 CC administered to down regulate the expression of aberrant genes. The
 CC aberrant gene may be ICAM-1, c-myc, c-myc, ras, raf, erb-B-2, PKC-alpha,
 CC IGF-1R, EGFR, VEGF and/or VEGF-R-1. The method may be used for the
 CC treatment of tumours, inflammatory diseases and/or infectious diseases
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 DB 18 ATGGCGCACGCTGGGAGA 1
 RESULT 99
 AAA39264/C
 ID AAA39264 standard; DNA; 18 BP.
 XX
 AC AAA39264;
 XX
 DT 08-SEP-2000 (first entry)
 DE
 DE CpG immunostimulatory oligonucleotide #2.
 XX CpG; immunostimulatory; adjuvant; vaccine; metal salt; antiviral;
 KW antibacterial; antiprotozoal; antimalarial; anti-allergic; anticancer;
 KW immune response; infection; allergy; cancer; ss.
 XX
 OS Unidentified.
 XX
 PN W0200023105-A2.
 XX
 XX 27-APR-2000.
 PD
 PD 08-OCT-1999; 99WO-EP007764.
 PF
 PF 16-OCT-1998; 98GB-00022703.
 PR 16-OCT-1998; 98GB-00022709.
 PR 16-OCT-1998; 98GB-00022712.
 XX
 XX (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
 PA
 XX Garcon N;
 XX
 XX WPI; 2000-339525/29.
 DR
 XX Adjuvant composition comprising immunostimulant, useful for preparing
 PT vaccines, deposited on metal salt particle that contains no antigen,
 PT which is present on separate particles.
 XX
 XX Disclosure; Page 6; 37pp; English.
 XX The present invention describes an adjuvant composition (A) comprising an
 CC immunostimulant (I) adsorbed on a metallic salt particle (II) that is
 CC practically free of antigen (Ag). Also described are: (1) preparation of
 CC a vaccine by mixing (A) with Ag; (2) vaccine comprising two major
 CC populations of complexes, one comprising (A) and the other Ag adsorbed on
 CC (II); and (3) kit comprising, in separate containers, monophosphoryl
 CC lipid A (MPI) adsorbed on metal salt and Ag adsorbed on metal salt. (A)

CC has antiviral, antibacterial, antiprotozoal, antimalarial, anti-allergic
 CC and anticancer activities, and can be used to induce a specific immune
 CC response. (A) are used in preparation of vaccines for treatment or
 CC prevention of a wide range of viral, bacterial and protozoal infections,
 CC also allergy and cancers. By adsorbing (I) and Ag on separate particles,
 CC vaccines (including those containing many Ag) can be produced simply by
 CC mixing, rather than by sequential adsorption of many components on to the
 CC same particles (which is time-consuming, expensive and difficult to
 CC control). The components may be tested individually and failure of any
 CC one component does not require rejection of an entire batch of vaccine.
 CC The new vaccines are as effective as those prepared conventionally. The
 CC present sequence represents a CpG immunostimulatory oligonucleotide which
 CC is used in the exemplification of the present invention
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 DB 18 ATGGCGCACGCTGGGAGA 1
 RESULT 100
 AAZ47680/C
 ID AAZ47680 standard; DNA; 18 BP.
 XX
 AC AAZ47680;
 XX
 DT 01-MAR-2000 (first entry)
 DE
 DE Parasitic infection preventing exemplary oligonucleotide SEQ ID NO:89.
 XX Immune system; immunostimulatory; parasitic infection; parasite;
 KW CpG oligonucleotide; antigen presenting cell; natural killer cell;
 KW granulocyte; malaria; helminth disease; tick; mite; ss.
 XX
 OS Synthetic.
 XX
 PN WO9956755-A1.
 XX
 PD 11-NOV-1999.
 XX
 PF 06-MAY-1999; 99WO-US009863.
 XX
 PF 06-MAY-1998; 98US-0084512P.
 PR
 PR (IOWA) UNIV IOWA RES FOUND.
 PA (OTTA-) OTTAWA CIVIC LOEB RES INST.
 PA (USNA) US SEC OF NAVY.
 XX
 PI Gramzinski RA, Krieg AM, Davis HL, Hoffman SL;
 XX
 XX WPI; 2000-062123/05.
 DR
 XX Treating and preventing parasitic infections using CpG oligonucleotides.
 PT
 XX Disclosure; Page 21; 74pp; English.
 XX The present invention describes a method for treating and preventing
 CC parasitic infection by administration of unmethylated CpG
 CC oligonucleotides. The CpG oligonucleotides are able to stimulate the
 CC innate immune system via the activation of immune cells, such as antigen
 CC presenting cells, natural killer cells and granulocytes. The CpG
 CC oligonucleotides and the method can be used to treat and prevent
 CC parasitic diseases, such as malaria, helminth diseases, tick and mites in
 CC humans, animals and poultry. The oligonucleotides may be administered in
 CC conjunction with parasiticides or other therapeutic compounds after an
 CC organism has been diagnosed to be infected with parasites. Diseases which
 CC can be treated or prevented include those caused by Plasmodium
 CC falciparum, P. ovale, P. malariae, P. vivax, P. knowlesi, Babesia

CC microti, B. divergens, Trypanosoma cruzi, T. gambiense, T. rhodesiense,
CC Schistosoma mansoni, Toxoplasma gondii, Trichinella spiralis, Leishmania
CC major, L. donovani, L. braziliensis, and L. tropica. The parasite is
CC especially capable of causing malaria. The present sequence represents a
CC parasitic infection preventing exemplary oligonucleotide sequence from
CC the present invention

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 101
AAZ47643/C
ID AAZ47643 standard; DNA; 18 BP.
AC AAZ47643;
XX
XX
DT 01-MAR-2000 (first entry)
DE Parasitic infection preventing exemplary oligonucleotide SEQ ID NO:49.
DE Immune system; immunostimulatory; parasitic infection; parasite;
KW Cpg oligonucleotide; antigen presenting cell; natural killer cell;
KW granulocyte; malaria; helminth disease; tick; mite; ss.
XX
XX Synthetic.
OS
OS WO9956755-A1.
PN
XX
XX 11-NOV-1999.
XX
XX 06-MAY-1999; 99WO-US009863.
XX
XX 06-MAY-1998; 98US-0084512P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
PA (OTTA-) OTTAWA CIVIC LOEB RES INST.
PA (USNA) US SEC OF NAVY.
XX
XX Gramzinski RA, Krieg AM, Davis HL, Hoffman SL;
XX WPI; 2000-062123/05.
XX
XX Treating and preventing parasitic infections using Cpg oligonucleotides.
XX
XX Disclosure; Page 20; 74pp; English.

CC The present invention describes a method for treating and preventing
CC parasitic infection by administration of unmethylated Cpg
CC oligonucleotides. The Cpg oligonucleotides are able to stimulate the
CC innate immune system via the activation of immune cells, such as antigen
CC presenting cells, natural killer cells and granulocytes. The Cpg
CC oligonucleotides and the method can be used to treat and prevent
CC parasitic diseases, such as malaria, helminth diseases, tick and mites in
CC humans, animals and poultry. The oligonucleotides may be administered in
CC conjunction with parasitocides or other therapeutic compounds after an
CC organism has been diagnosed to be infected with parasites. Diseases which
CC can be treated or prevented include those caused by Plasmodium
CC falciparum, P. ovale, P. malariae, P. vivax, P. knowlesi, Babesia
CC microti, B. divergens, Trypanosoma cruzi, T. gambiense, T. rhodesiense,
CC Schistosoma mansoni, Toxoplasma gondii, Trichinella spiralis, Leishmania
CC major, L. donovani, L. braziliensis, and L. tropica. The parasite is
CC especially capable of causing malaria. The present sequence represents a
CC parasitic infection preventing exemplary oligonucleotide sequence from
CC the present invention

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 102
AAA91620/C
ID AAA91620 standard; DNA; 18 BP.
XX
XX AAA91620;
XX
XX 20-DEC-2000 (first entry)
XX Human Bcl-2 antisense oligonucleotide.
DE Human; Bcl-2 antisense oligonucleotide; ribonucleotide reductase;
XX R1 protein; R2 protein; tumour cell proliferation inhibition; cancer;
KW cytosolic; ss.
XX
XX Homo sapiens.
OS
OS Synthetic.
XX
XX WO200047733-A1.
PN
XX
XX 17-AUG-2000.
XX
XX '09-FEB-2000; 2000WO-CA000120.
XX
XX 11-FEB-1999; 99US-00249730.
XX
XX (GENE-) GENESENSE TECHNOLOGIES INC.
XX
XX Wright JA, Young RH;
XX WPI; 2000-558216/51.
XX
XX New antisense oligonucleotide, AS-I-618-20, is useful for inhibiting
XX tumor cell growth.
XX
XX Example 13; Page 105; 137pp; English.

CC The present sequence is an antisense oligonucleotide directed against Bcl
CC -2. Antisense oligonucleotides directed against a number of tumour-
CC associated genes were administered to mice injected with human colon
CC carcinoma cells, human melanoma cells or human lung cancer cells. The
CC tumour was removed 14 days after treatment and its weight was measured.
CC This was performed as an example of a method for modulating cell
CC proliferation. Antisense oligonucleotides were also made that were
CC directed against the R1 or R2 component of mammalian ribonucleotide
CC reductase. Ribonucleotide reductase catalyses the conversion of
CC ribonucleotides to their corresponding deoxyribonucleotides and thus
CC plays an important role in DNA synthesis and cell proliferation.
CC Regulation of ribonucleotide reductase is altered in cultured malignant
CC cells and increased levels of R2 protein and R2 mRNA have been found in
CC pre-malignant and malignant tissues as compared to normal control tissue
CC samples. Antisense sequence are therefore useful for inhibiting
CC tumourigenicity of neoplastic cells and inhibiting metastasis of tumour
CC cells. They are also useful for increasing sensitivity of neoplastic
CC cells to chemotherapeutic drugs, thus allowing chemotherapeutic
CC treatments to be used in patients who have become resistant or less
CC sensitive to chemotherapy

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 103
 AAC60278/c
 ID AAC60278 standard; DNA; 18 BP.
 XX
 AC AAC60278;
 XX
 DT 14-FEB-2001 (first entry)
 XX
 DE Immunostimulatory oligonucleotide #2.
 XX
 KW Immunostimulatory; oligonucleotide; cancer; allergy; Alzheimer's disease;
 XX atherosclerosis; viral; bacterial; parasitic; infection; ss.
 OS Homo sapiens.
 XX
 PN WO200062800-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 04-APR-2000; 2000WO-EP002920.
 XX
 PR 19-APR-1999; 99GB-00008885.
 XX
 PR 29-APR-1999; 99US-00301829.
 XX
 PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
 XX
 PI Friede M, Garcon N, Hermand P;
 XX
 XX WPI; 2000-687101/67.
 DR
 XX
 XX Adjuvant composition comprising saponin and immunostimulatory
 PT oligonucleotide CPG, useful for producing vaccine formulations for
 PT prophylaxis and treatment of cancers, allergy and Alzheimer's disease.
 PS
 PS Claim 5; Page 4; 52pp; English.
 XX
 XX The present invention relates to an adjuvant composition comprising a
 CC saponin and an immunostimulatory oligonucleotide. A vaccine composition
 CC containing the adjuvant is useful for inducing an immune response in an
 CC individual and for preventing or treating disease. Diseases include
 CC cancers; allergy; Alzheimer's disease and atherosclerosis. The vaccine is
 CC also useful for prophylaxis and treatment of viral, bacterial and
 CC parasitic infections. The present sequence is an oligonucleotide of the
 CC invention
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 104
 AAC65037/c
 ID AAC65037 standard; DNA; 18 BP.
 XX
 AC AAC65037;
 XX
 DT 12-FEB-2001 (first entry)
 XX
 DE Bcl2 antisense sequence SEQ ID NO: 20.
 XX
 XX Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
 XX

KW protein kinase C; PKC; PCR primer; ss.
 OS Homo sapiens.
 XX
 PN WO200061810-A1.
 XX
 PD 19-OCT-2000.
 XX
 PF 07-APR-2000; 2000WO-US009293.
 XX
 PR 08-APR-1999; 99US-0128377P.
 XX
 PA (OASI-) OASIS BIOSCIENCES INC.
 XX
 PI Brown BD, Riley TA;
 XX
 XX WPI; 2000-679502/66.
 DR
 XX Antisense oligonucleotides containing degenerate and/or universal bases,
 PT and modified backbone linkages is useful to target therapeutic genes,
 PT preferably anti-apoptosis or chemoresistance genes.
 XX
 XX Example 4; Page 11; 32pp; English.
 XX
 CC The present invention is concerned with antisense oligonucleotides
 CC containing a number of degenerate bases and with a modified backbone
 CC which can be used to direct cleavage of target RNA molecules. The use of
 CC degenerate bases reduces the risk of immune activation following
 CC injection into animals, which causes deleterious side effects associated
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C65077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 105
 AAC64137/c
 ID AAC64137 standard; DNA; 18 BP.
 XX
 AC AAC64137;
 XX
 DT 19-FEB-2001 (first entry)
 XX
 DE Immunostimulatory CpG oligonucleotide WD0002 used in an RSV vaccine.
 XX
 KW Immunostimulatory oligonucleotide; CpG oligonucleotide;
 KW respiratory syncytial virus; RSV; vaccine; phosphorothioate;
 KW unmethylated; adjuvant; ss.
 XX
 OS Synthetic.
 XX
 PN WO200062802-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 17-APR-2000; 2000WO-EP003516.
 XX
 PR 20-APR-1999; 99GB-00009077.
 XX
 PR 28-JUN-1999; 99GB-00015106.
 XX
 PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
 XX
 PI Deschamps M;
 XX

DR WPI; 2000-679550/66.
XX Novel vaccine formulation comprising a respiratory syncytial virus (RSV)
PT antigen and an immunostimulatory CpG oligonucleotide useful for treating
PT RSV infections mutations.
XX
PS Claim 9; Page 26; 34pp; English.
XX
CC The invention relates to a novel vaccine formulation comprising a
CC respiratory syncytial virus (RSV) antigen and an immunostimulatory CpG
CC oligonucleotide. The CpG motifs of the immunostimulatory oligonucleotide
CC are unmethylated, and the backbone of the oligonucleotide is preferably
CC all-phosphorothioate. The RSV antigen used may be F (fusion) protein, G
CC (attachment) protein, an FG fusion protein, an immunogenic derivative of
CC any of these proteins, or inactivated RSV. RSV causes lower respiratory
CC tract illness in humans, particularly in children and the elderly. The
CC RSV vaccine of the invention is used for preventing or ameliorating RSV
CC infection in a patient. The present sequence represents an
CC immunostimulatory CpG oligonucleotide which may be used in the RSV
CC vaccine of the invention
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 106
AAH20395/c
ID AAH20395 standard; DNA; 18 BP.
XX
AC AAH20395;
DT 03-AUG-2001 (first entry)
XX
DE CpG motif containing oligonucleotide SEQ ID #6.
XX
KW Immune system stimulator; CpG motif; CpG receptor; CpG-R; antibacterial;
KW immune response; vaccine adjuvant; tumour immunotherapy; allergy;
KW anti-inflammatory; cystic fibrosis; sepsis; heart disease; chlamydia;
KW inflammatory bowel disease; arthritis; multiple sclerosis; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate internucleoside linkages"
XX
PN WO200132877-A2.
XX
PD 10-MAY-2001.
XX
XX 01-NOV-2000; 2000WO-US041735.
PF
XX 02-NOV-1999; 99US-0163157P.
PR
XX 24-NOV-1999; 99US-0167389P.
XX
PA (CHIR)- CHIRON CORP.
XX
XX Mackichan ML;
PI
XX WPI; 2001-343486/36.
DR
XX Novel CpG receptor and nucleic acid molecule encoding the receptor, for
PT modulating immune response and for identifying compounds of therapeutic
PT use which bind and/or modulate the activity of the receptor.
PT

XX Example 1; Page 14; 41pp; English.
PS
XX Unmethylated CG dinucleotide sequences are commonly found in bacterial
CC DNA, and have been found to stimulate the innate immune system. Natural
CC killer and T cells are activated by exposure to oligonucleotides
CC containing CpG motifs. Oligonucleotides containing CpG motifs can be used
CC as adjuvants in vaccines. The present invention relates to a CpG
CC receptor. The CpG receptor contains a Toll homology domain (THD). The
CC Toll receptor family are associated with responses to pathogens. CpG
CC oligonucleotides may act as stimulators of various immune responses. The
CC CpG receptor or cells expressing the receptor are useful for identifying
CC a compound which binds to or modulates an activity of the CpG receptor.
CC The compounds are useful in e.g. vaccine adjuvants promoting cell-
CC mediated immune responses, antibacterials, (e.g. protection from listeria
CC infection), tumour immunotherapy, allergy treatment, (e.g. suppressing
CC IGE in human PBMC, shifting from Th2 to Th1) and as anti-inflammatory
CC agents (e.g. for use in cystic fibrosis, sepsis, heart disease,
CC chlamydia, inflammatory bowel disease, arthritis and multiple sclerosis).
CC The present sequence represents a CpG motif containing oligonucleotide the
CC used in examples demonstrating that CpG oligonucleotides can activate the
CC MAPK pathways and NF-kappaB
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 107
AAH50615/c
ID AAH50615 standard; DNA; 18 BP.
XX
AC AAH50615;
DT 22-AUG-2001 (first entry)
XX
DE Natural killer cell lytic activity inducing oligonucleotide SEQ ID NO:45.
XX
KW Immunostimulatory; inducing; natural killer cell; lytic activity;
KW unmethylated CpG dinucleotide; immune response; B cell proliferation;
KW Th1; immune activation; interleukin 6; IL-6; interferon gamma; IFN-gamma;
KW cytokine; ss.
XX
OS Synthetic.
XX
PN US6239116-B1.
XX
PD 29-MAY-2001.
XX
PF 30-OCT-1997; 97US-00960774.
XX
PR 30-OCT-1996; 96US-00738652.
XX
XX (IOWA) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GROUP INC.
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Krieg AM, Kline JN;
XX
XX WPI; 2001-380456/40.
DR
XX Methods for inducing IL-6, interferon-gamma or IL-12, or stimulating
PT natural killer cell lytic activity in a human, comprise administering to
PT the subject or exposing a natural killer cell to immunostimulatory
PT nucleic acids.
XX
PS Disclosure; Col 32; 74pp; English.

XX The present invention describes methods for inducing interleukin 6 (IL-6), interferon-gamma (IFN-gamma) or IL-12, or for stimulating natural killer cell lytic activity. The methods comprise administering to the subject or exposing a natural killer cell to an immunostimulatory nucleic acid. Also described are: (1) inducing IL-6 in a subject comprising administering to the subject to induce IL-6 in the subject the immunostimulatory nucleic acid; (2) stimulating natural killer cell lytic activity comprising exposing a natural killer cell to the immunostimulatory nucleic acid to stimulate natural killer cell lytic activity; (3) inducing interferon-gamma in a subject to treat an immune system deficiency comprising administering to the subject to induce interferon-gamma production, the immunostimulatory nucleic acid; and (4) inducing IL-12 in a subject comprising administering to the subject the immunostimulatory nucleic acid. The methods are useful for inducing IL-6, interferon-gamma or IL-12, or stimulating natural killer cell lytic activity in a subject, particularly a human. The methods are particularly useful for modulating an immune response. AAH50571 to AAH50671 represent oligonucleotide sequences used in the exemplification of the present invention

XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 108
AAH60923/C
ID AAF60923 standard; DNA; 18 BP.
XX
AC AAF60923;
DT 15-MAY-2001 (first entry)
XX
DE Anti-bcl oligonucleotide SEQ ID 32.
XX
KW Transport; membrane; cytostatic; virucide; vasotropic; dermatological;
KW antipsoriatic; antiasthmatic; gene therapy; tumor cell; antisense;
KW tumor therapy; drug; ss.
XX
OS Unidentified.
XX
PN DE19935302-A1.
XX
PD 08-FEB-2001.
XX
PF 28-JUL-1999; 99DE-01035302.
XX
PR 28-JUL-1999; 99DE-01035302.
XX
PA (AVET) AVENTIS PHARMA DEUT GMBH.
XX
PI Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;
XX WPI; 2001-203679/21.
XX
PT New substituted aryl conjugates of parent molecules, especially
PT oligonucleotides, having improved transmembrane and intracellular
PT transport properties, useful as medicaments or diagnostic agents.
XX
PS Disclosure; Page 7; 28pp; German.
XX
CC This invention describes a novel conjugate (I) which consists of (A) a
CC molecule to be transported and (B) at least one aryl residue of formula -
CC Ar-(X-CY)-R₁-n (II). Ar = group containing at least one aromatic ring;
CC X = O or N (sic); Y = O, S or NH-R₂ (sic); R₁ = optionally substituted
CC 1-23C alkyl (optionally containing double and/or triple bonds); R₂ =

CC optionally substituted 1-18C alkyl (optionally containing double and/or
CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or
CC via a chemical group, provided that the chemical group is other than CH₂
CC -S if the bond is via a phosphodiester linkage of (A). The invention also
CC describes (i) the preparation of a conjugate (I') of (A') a molecule to
CC be transported and (B') at least one aryl residue (not restricted to
CC (II)), by preparing (A') containing a reactive function at the position
CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');
CC and (ii) the use of aryl groups (II) (optionally bonded via a chemical
CC group) for transporting (A) across biological membranes. The products of
CC the invention have cytostatic, virucide, vasotropic, dermatological,
CC antipsoriatic and antiasthmatic activity and can be used for gene
CC therapy. Conjugation of (A) with (B) is useful for transporting (A)
CC across biological membranes or into eukaryotic or prokaryotic cells
CC (specifically bacterial, yeast or mammalian cells, including human cells,
CC particularly tumor cells). Medicaments, diagnostic agents and test kits
CC containing (I) are also claimed. Typically (I) are antisense
CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for
CC treating viral infections or diseases associated with integrins or cell-
CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or
CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ
CC hybridization. Conjugation with (B) markedly improves the cellular uptake
CC of (A), e.g. in tumor cells. (B) include fluorescein derivative residues,
CC in which case the conjugates (I) are fluorescently labeled, allowing
CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)
CC is superior to that obtained using other conjugated groups related to
CC (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within
CC the scope of (B)) have superior uptake to corresponding fluorescein
CC conjugates

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 109
AAH19305/C
ID AAH19305 standard; DNA; 18 BP.
XX
AC AAH19305;
XX
DT 13-JUL-2001 (first entry)
XX
DE CpG oligonucleotide #6.
XX
KW Immunostimulant; antiallergic; cytostatic; antiasthmatic; vaccine;
KW gene therapy; CpG; immune system deficiency; tumour; cancer; infection;
KW leukaemia; ss.
XX
OS Synthetic.
XX
PN US6207646-B1.
XX
PD 27-MAR-2001.
XX
PF 30-OCT-1996; 96US-00735652.
XX
PF 15-JUL-1994; 94US-00276358.
XX
PR 07-FEB-1995; 95US-00386063.
XX
PA (IOWA) UNIV IOWA RES FOUND.
XX (COLE-) COLEY PHARM GROUP INC.
XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX Krieg AM, Kline J, Klinman D, Steinberg AD;
XX WPI; 2001-280761/29.

XX Compositions comprising immunostimulatory molecules which comprise
PT unethylated CpG dinucleotides useful for ameliorating immune system
PT deficiency, treating leukemia and desensitizing subject against allergic
PT response.
XX
PS Disclosure; Col 29-30; 55pp; English.
XX
XX The present invention relates to a composition comprising an isolated
CC immunostimulatory nucleic acid which comprises unmethylated cytosine-
CC guanine (CpG) dinucleotides and an antigen in a carrier. The present
CC sequence is an oligonucleotide, which was used in the present invention.
CC The immunostimulatory nucleic acids are useful for ameliorating an immune
CC system deficiency (the presence of tumor, cancer or infectious agent) in
CC a subject. The immunostimulatory nucleic acids are also useful for
CC desensitizing a subject against the occurrence of an allergic reaction in
CC response to contact with a particular allergen. The immunostimulatory
CC nucleic acids are also useful for vaccination and for treating leukaemia
CC in a subject on administration prior to or in conjunction with a
CC chemotherapy, so that the subject's leukaemia cells are more sensitive to
CC chemotherapy. The compositions are useful for inducing an antigen
CC specific immune response in the subject. The compositions can be also
CC used to treat or prevent the symptoms of asthma
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 110
AAF98832/C
ID AAF98832 standard; DNA; 18 BP.
AC AAF98832;
XX
XX 11-JUN-2001 (first entry)
XX
XX CpG immunostimulatory nucleic acid SEQ ID NO: 110.
XX
XX Immunostimulatory nucleic acid; ISNA; human; interferon alpha; IFN-alpha;
XX viral infection; phosphorothioate backbone; palindromic; cancer; ds.
XX Synthetic.
XX WO200122990-A2.
XX
XX 05-APR-2001.
XX
XX 27-SEP-2000; 2000WO-US026527.
XX
XX 27-SEP-1999; 99US-0156147P.
XX
XX (COLE-); COLEY PHARM GROUP INC.
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Hartmann G, Bratzler RL, Krieg A;
XX WPI; 2001-290487/30.
XX
XX Improving the efficacy of treatments involving the administration of
XX interferon-alpha by co-administering an isolated immunostimulatory
XX nucleic acid.
XX
XX Disclosure; Page 22; 168pp; English.
XX
XX The present invention describes an improvement to a method requiring the
XX administration of interferon alpha (IFN-alpha), involving administering

CC an immunostimulatory nucleic acid (ISNA). The sequences of a number of
CC such nucleic acids are also provided. These may comprise oligonucleotides
CC with phosphorothioate backbones, palindromes, or G-rich sequences. The
CC sequences of the invention are useful in the treatment of proliferative
CC diseases, such as cancers, and viral infections. The present sequence is
CC an example of an immunostimulatory oligonucleotide
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 111
AAF59502/C
ID AAF59502 standard; DNA; 18 BP.
XX
XX AAF59502;
XX
XX 24-APR-2001 (first entry)
XX
XX Immunostimulatory CpG oligonucleotide WD1002 for use in an HIV vaccine.
XX
XX Immunostimulatory CpG oligonucleotide; adjuvant; HIV antigen;
XX HIV infection; vaccine; prophylaxis; treatment; ss.
XX Synthetic.
XX WO200100232-A2.
XX
XX 04-JAN-2001.
XX
XX 28-JUN-2000; 2000WO-EP005998.
XX
XX 29-JUN-1999; 99GB-00015205.
XX
XX 31-JAN-2000; 2000GB-00002200.
XX
XX (SMYK) SMITHKLINE BEECHAM BIOLOGICALS.
XX
XX Garcon N, Voss G;
XX WPI; 2001-122974/13.
XX
XX New vaccine formulation comprising human immunodeficiency virus (HIV)
XX antigen and immunostimulatory CpG oligonucleotide, useful for preventing
XX and treating HIV infections in a patient.
XX
XX Claim 10; Page 17; 23pp; English.
XX
XX The invention relates to an HIV vaccine comprising an HIV antigen and an
XX immunostimulatory oligonucleotide (AAF59501-AAF59508). With the exception
XX of oligonucleotide WD1005 (AAF59505), the immunostimulatory
XX oligonucleotides contain at least one unmethylated CpG motif. In
XX preferred embodiments the internucleotide linkage is phosphorothioate,
XX although phosphodiester and other internucleotide bonds, or mixtures of
XX linkages are within the scope of the invention. The HIV antigen may be
XX selected from gp160, gp120, Nef, Tat, and Nef or Tat derivatives or
XX fusion proteins. The vaccine is used for the prophylaxis or treatment of
XX HIV infection in a patient. The present sequence represents a
XX specifically claimed immunostimulatory CpG oligonucleotide for use in the
XX vaccine of the invention
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 ID AAF98929/c
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 112
 AAF98930/c
 ID AAF98930 standard; DNA; 18 BP.
 XX AC AAF98930;
 XX DT 12-JUN-2001 (first entry)
 XX DE Immunostimulatory nucleic acid #46.
 XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX OS Synthetic.
 XX PN WO200122972-A2.
 XX PD 05-APR-2001.
 XX PF 25-SEP-2000; 2000WO-US026383.
 XX PR 25-SEP-1999; 99US-0156113P.
 XX PR 27-SEP-1999; 99US-0156135P.
 XX PR 23-AUG-2000; 2000US-0227436P.
 XX PA (IOWA) UNIV IOWA RES FOUND.
 XX PA (COLE-) COLEY PHARM GMBH.
 XX PI Krieg AM, Schetter C, Vollmer J;
 XX WPI; 2001-273485/28.
 XX DR Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.
 XX PS Disclosure; Page 39; 338pp; English.

CC The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone

XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 114
 AAF98966/c
 ID AAF98966 standard; DNA; 18 BP.
 XX AC AAF98966;
 XX DT 12-JUN-2001 (first entry)
 XX DE Immunostimulatory nucleic acid #82.
 XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;

QY 1 ATGGCGCAGCTGGGAGA 18
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 114
 AAF98966/c
 ID AAF98966 standard; DNA; 18 BP.
 XX AC AAF98966;
 XX DT 12-JUN-2001 (first entry)
 XX DE Immunostimulatory nucleic acid #82.
 XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;

KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
OS Synthetic.
XX WO200122972-A2.
XX
XX
XX 05-APR-2001.
XX
XX 25-SEP-2000; 2000WO-US026383.
XX
XX 25-SEP-1999; 99US-0156113P.
XX 27-SEP-1999; 99US-0156135P.
XX 23-AUG-2000; 2000US-0227436P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
XX WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
XX using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Disclosure; Page 40; 338pp; English.
XX
XX The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
RESULT 115
AAF98885/C
ID AAF98885 standard; DNA; 18 BP.
XX
XX AAF98885;
XX
XX 12-JUN-2001 (first entry)
XX
XX Immunostimulatory nucleic acid #1.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX Synthetic.
OS
XX WO200122972-A2.
XX
XX

PD 05-APR-2001.
XX
XX 25-SEP-2000; 2000WO-US026383.
XX
XX 25-SEP-1999; 99US-0156113P.
XX 27-SEP-1999; 99US-0156135P.
XX 23-AUG-2000; 2000US-0227436P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
XX WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
XX using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Example 12; Page 38; 338pp; English.
XX
XX The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1
RESULT 116
AAF92362/C
ID AAA92362 standard; DNA; 18 BP.
XX
XX AAA92362;
XX
XX 12-JAN-2001 (first entry)
XX
XX CG motif and CFA containing oligonucleotide SEQ ID NO:4.
XX
XX CG motif; complete Freund's adjuvant; phosphorothioate; immunogenic;
KW Neisseria antigen; Neisseria meningitidis; Neisseria gonorrhoeae;
KW bactericidal; antibacterial; vaccine; immunostimulatory; infection;
KW immune response; ss.
XX
XX Neisseria sp.
XX
XX Key Location/Qualifiers
FT modified_base 1..18
FT /*tag= a
FT /note= "preferably contains at least one phosphorothioate
FT bond"
XX
XX WO200050075-A2.
XX
XX 31-AUG-2000.
XX


```

ABK90285/c
ID ABK90285 standard; DNA; 18 BP.
XX
AC ABK90285;
XX
21-OCT-2002 (first entry)
XX
DE Bcl-2-targeting antisense oligonucleotide #18.
XX
KW Antisense; ss; probe; Bcl-2; cell proliferative disorder; cancer; CRE;
KW cAMP response element; bacterial infection; viral infection;
KW inflammation; anaphylaxis; allergy; arthritis; asthma; cytostatic;
KW autoimmune disorder; parasitic infection; virucide; hyperplasia;
KW tumorigenesis; hepatitis B infection; human.
XX
OS Homo sapiens.
XX
FN WO200257480-A2.
XX
25-JUL-2002.
XX
22-JAN-2002; 2002WO-US001967.
XX
22-JAN-2001; 2001US-0263244P.
XX
(GENT-) GENTA INC.
XX
Klem RE;
XX
WPI; 2002-590754/63.
XX
Hybrid oligomer comprises a cyclic AMP response element sequence and a
sequence that hybridizes to the bcl-2 pre-mRNA or mRNA useful for
preventing or treating cell-proliferative disorders e.g., cancer.
XX
Disclosure; Page 13; 78pp; English.
XX
The invention relates to a hybrid oligomer comprising a cyclic AMP
response element (CRE) sequence and a sequence that hybridizes to the bcl
-2 pre-mRNA or mRNA. Also included are: (1) inhibiting the growth of
cancer cells in vitro, which comprises contacting the cancer cells with a
hybrid oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer;
(2) treating or preventing cancer in a human, which comprises
administering a hybrid oligomer or a bcl-2 antisense oligomer and a CRE
decoy oligomer; and (3) a pharmaceutical composition comprising a hybrid
oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer and a
carrier. The pharmaceutical composition of the invention is useful for
preventing or treating cell-proliferative disorders e.g., cancer,
hyperplasia or tumorigenesis and also bacterial infection, viral
infection, inflammation, anaphylaxis, allergy, arthritis, asthma,
autoimmune disorders and parasitic infection. The CRE decoy oligomer and
bcl-2 antisense oligomer are also useful for preventing or treating
hepatitis B virus infection. The hybrid oligomers can also be used for
screening candidate transcription factors or other molecules e.g., gene
regulatory proteins or for diagnostic assays. The present sequence is a
Bcl-2 antisense oligonucleotide
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
RESULT 122
ABL01615/c
ID ABL01615 standard; DNA; 18 BP.
XX
AC ABL01615;
XX

```

```

XX
DT 15-MAR-2002 (first entry)
XX
DE bcl-2 targeted antisense peptide nucleic acid SEQ ID NO: 21.
XX
KW Peptide nucleic acid; PNA; cytostatic; virucide; dermatological;
KW antiasthmatic; overexpression; viral infection; vitiligo; antisense;
KW pigmentation disorder; asthma; polyamide backbone; ss.
XX
OS Unidentified.
XX
Key Location/Qualifiers
FT modified_base 1..18
FT /tag= a
FT /note= "This sequence is a peptide nucleic acid, i.e. it
FT contains a polyamide backbone instead of a deoxyribose
FT backbone"
FT modified_base 1
FT /tag= b
FT /mod_base= OTHER
FT /note= "linked to one of the peptides shown in ABB04517
FT and ABB04518 to form a PNA-peptide conjugate"
XX
FN WO200179216-A2.
XX
25-OCT-2001.
XX
07-APR-2001; 2001WO-EPC04030.
XX
18-APR-2000; 2000DE-01019135.
XX
(AVET ) AVENTIS PHARMA DEUT GMBH.
XX
Unlmann E, Breipohl G, Will DW;
XX
WPI; 2002-075055/10.
XX
New peptide nucleic acid derivatives, useful e.g. for tumor treatment and
diagnosis, contain terminal, deprotonizable phosphoryl groups for e.g.
improved solubility.
XX
Disclosure; Page 20; 93pp; German.
XX
The present invention relates to peptide nucleic acid (PNA) derivatives
having at the C-, and optionally N-, terminus one or more phosphoryl
groups, at least one of which contains one or more deprotonisable groups,
preferably hydroxy or mercapto. These PNAs are useful in the treatment of
tumours or any disease associated with (over)expression of particular
genes, including viral infections, vitiligo or other pigmentation
disorders, and asthma. The present sequence is a peptide nucleic acid
described in the exemplification of the invention
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
RESULT 123
AAL44699/c
ID AAL44699 standard; DNA; 18 BP.
XX
AC AAL44699;
XX
03-MAY-2002 (first entry)
XX
Human bcl-2 antisense oligonucleotide PT-G3139.
XX

```

KW Human; visual-servoing optical microscopy; cell type; cell analysis;
 KW chemotherapy testing; bcl-2; phosphorothioate backbone; antisense; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 FT
 XX WO200194528-A2.
 XX
 PN 13-DEC-2001.
 PD
 XX
 XX 07-JUN-2001; 2001WO-US018382.
 XX
 PF
 XX 08-JUN-2000; 2000US-0210543P.
 XX
 PR
 XX (REGC) UNIV CALIFORNIA.
 XX
 PA Callahan DE, Parvin B;
 XX
 PI WPI; 2002-205819/36.
 XX
 DR Coupling visual servoing microscopy technique with living cell analysis
 XX involves analyzing image data received from detection device monitoring
 PT cells, and automatically actuating stimulating devices to stimulate
 PT cells.
 XX
 XX Example 7; Page 83; 111pp; English.
 XX
 PS The present invention relates to a method of coupling visual servoing
 XX microscopy with living cell analysis, where cellular image data received
 CC from a detection device that monitors cells or subcellular components of
 CC the cells, is analysed, and in response to the analysed cellular image
 CC data several stimulating devices adapted to stimulate the cells or
 CC subcellular components, is automatically actuated. The method is useful
 CC for carrying out cell-type specific fluorescence assays that are useful
 CC for any types of cells, and allows detection and discrimination between
 CC normal, premalignant, malignant and/or multidrug resistant cancer cells
 CC obtained from tissue, for establishing a chemotherapeutic regimen that is
 CC tailored to an individual patient and/or individual tumour and for
 CC screening large numbers of potential drug, insecticide, herbicide and
 CC other compounds for use in medicine, agriculture and biotechnology. The
 CC present sequence is an antisense sequence aimed at the human bcl-2 coding
 CC sequence which was used in the exemplification of the invention
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 Db 18 ATGGCGCACGCTGGGAGA 1
 RESULT 124
 ABS77607/c
 ID ABS77607 standard; DNA; 18 BP.
 XX
 AC ABS77607;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Angiogenesis inhibitory oligonucleotide #91.
 XX
 KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 XX

KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 XX scleroderma; hypertrophic scar.
 XX Synthetic.
 XX WO200253141-A2.
 XX
 PN 11-JUL-2002.
 PD
 XX
 XX 14-DEC-2001; 2001WO-US049458.
 XX
 PF
 XX 14-DEC-2000; 2000US-0255534P.
 XX
 PR
 XX (COLE-) COLEY PHARM GROUP INC.
 XX
 PA Bratzler RL;
 XX
 PI WPI; 2002-566690/60.
 XX
 DR Inhibiting angiogenesis in a subject, involves administering at least one
 XX antiangiogenic nucleic acid molecule to the subject.
 PT
 XX Claim 2; Page 21; 276pp; English.
 PS
 XX The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis; Osler-Webber Syndrome; myocardial angiogenesis; plaque
 CC neovascularisation; telangiectasia; haemophilic joint; angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 Db 18 ATGGCGCACGCTGGGAGA 1
 RESULT 125
 ABS77570/c
 ID ABS77570 standard; DNA; 18 BP.
 XX
 AC ABS77570;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Angiogenesis inhibitory oligonucleotide #54.
 XX
 KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.
 XX Synthetic.
 XX

PT Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.

PS Claim 2; Page 19; 276pp; English.

XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubeosis, Osher-Webber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. NO. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 128
ABL39323/C
ID ABL39323 standard; DNA; 18 BP.
XX ABL39323;
XX 16-APR-2002 (first entry)
XX Immunostimulatory nucleic acid SEQ ID NO: 755.
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..18
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"

XX WO200197843-A2.
XX 27-DEC-2001.
XX 22-JUN-2001; 2001WO-US020154.
XX 22-JUN-2000; 2000US-0213346P.
XX (IOWA) UNIV IOWA RES FOUND.
XX Weiner G, Hartmann G;
XX WPI; 2002-154611/20.

XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX Disclosure; Page 288; 312pp; English.

CC The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. NO. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 129
ABL39324/C
ID ABL39324 standard; DNA; 18 BP.
XX ABL39324;
XX 16-APR-2002 (first entry)
XX Immunostimulatory nucleic acid SEQ ID NO: 756.
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX angiogenesis; metastasis; cytostatic; ss.
XX Synthetic.
XX WO200197843-A2.
XX 27-DEC-2001.

XX 22-JUN-2001; 2001WO-US020154.
XX 22-JUN-2000; 2000US-0213346P.
XX (IOWA) UNIV IOWA RES FOUND.
XX Weiner G, Hartmann G;
XX WPI; 2002-154611/20.

XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX Disclosure; Page 288; 312pp; English.

XX The present invention relates to methods for treating or preventing
XX cancer, involving administering to a subject having or at risk of
XX developing cancer immunostimulatory nucleic acids that induce expression
XX of cell surface antigens and antibodies. The methods are useful for
XX treating or preventing cancer such as basal cell carcinoma, bladder
XX cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX breast cancer, cervical cancer, colon and rectum cancer, connective
XX tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
XX Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin

```

CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention
XX
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGGCGACGCTGGGAGA 18
DB 18 ATGGGCGACGCTGGGAGA 1

RESULT 130
ABA97468/c
ID ABA97468 standard; DNA; 18 BP.
XX
XX ABA97468;
XX
DT 16-APR-2002 (first entry)
DE Bcl-2 targeted antisense peptide nucleic acid SEQ ID NO: 14.
XX
XX Peptide nucleic acid; PNA; polyamide backbone; phosphoryl radical;
XX cytostatic; virucide; dermatological; antiasthmatic; cancer; antisense;
XX viral infection; vitiligo; pigmentation disorder; asthma; ss.
XX
XX Unidentified.
OS
OS Synthetic.
XX
XX WO200179249-A2.
XX
XX 25-OCT-2001.
XX
XX 07-APR-2001; 2001WO-EP004027.
XX
XX 18-APR-2000; 2000DE-01019136.
XX
XX (AVET ) AVENTIS PHARMA DEUT GMBH.
XX
XX Uhlmann E, Breipohl G, Will DW;
XX
XX WPI; 2002-089643/12.
XX
XX New peptide nucleic acid derivatives, useful e.g. for treating tumors and
XX diagnosis, have N-terminal phosphoryl residue for improving e.g.
XX solubility in water.
XX
XX Disclosure; Page 79; 96pp; German.
XX
XX The present invention relates to peptide nucleic acid (PNA) derivatives.
XX or other can be used in the treatment of cancer, viral infections, vitiligo
XX or other pigmentation disorders, and asthma. The present sequence is an
XX oligonucleotide fragment of a PNA described in the exemplification of the
XX invention
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGGCGACGCTGGGAGA 18
DB 18 ATGGGCGACGCTGGGAGA 1

RESULT 131
ABA973939/c
ID ABA973939 standard; DNA; 18 BP.
XX
XX

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AC ABA973939;
XX
XX 13-JAN-2003 (first entry)
XX
XX Methylated CpG oligonucleotide 1812.
XX
XX Immunostimulant; CpG; infection; allergy; asthma; cancer; anaemia;
XX thrombocytopaenia; neutropenia; antimicrobial; antiasthmatic;
XX cytostatic; antianaemic; antiallergic; haemostatic; phosphorothioate; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..18
XX /tag= a
XX /mod_base= OTHER
XX modified_base 2
XX /note= "phosphorothioate linkage"
XX /tag= b
XX /mod_base= m5C
XX modified_base 4
XX /tag= c
XX /mod_base= m5C
XX modified_base 5
XX /tag= d
XX /mod_base= m5C
XX modified_base 6
XX /tag= e
XX /mod_base= m5C
XX modified_base 9
XX /tag= f
XX /mod_base= m5C
XX modified_base 13
XX /tag= g
XX /mod_base= m5C
XX modified_base 15
XX /tag= h
XX /mod_base= m5C
XX modified_base 16
XX /tag= i
XX /mod_base= m5C
XX
XX WO200269369-A2.
XX
XX 06-SEP-2002.
XX
XX 10-DEC-2001; 2001WO-IB002888.
XX
XX 08-DEC-2000; 2000US-0254341P.
XX
XX (COLE-) COLEY PHARM GROUP LTD.
XX
XX Schetter C, Vollmer J;
XX
XX WPI; 2002-723213/78.
XX
XX New compositions comprising CpG-like immunostimulatory nucleic acids,
XX useful for treating or preventing infectious diseases, cancer, allergy,
XX asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
XX
XX Example 1; Page 88; 148pp; English.
XX
XX The present sequence is that of methylated CpG oligonucleotide 1812, a
XX methylated version of CpG oligonucleotide 1758 (see ABA973938).
XX Oligonucleotide 1812 was used in examples of the invention in which
XX methylated CpG oligonucleotides and their non-methylated CpG counterparts
XX were compared for immunostimulant activity. In these examples, most
XX methylated CpG oligonucleotides exhibited B cell stimulatory potential at
XX almost the same level as the corresponding unmethylated sequences. An
XX exception was oligonucleotide 1812. Methylated CpG oligonucleotides of
XX the invention are useful for inducing an immune response in a subject,
XX including humans, for the treatment or prevention of an infectious
XX disease, cancer, allergy or asthma, for enhancing or stimulating bone
XX

```


CC marrow proliferation in an immunodeficiency, particularly in a subject
CC undergoing chemotherapy, for enhancing erythropoiesis in anaemia, for
CC enhancing thrombopoiesis in thrombocytopaenia, for enhancing neutrophil
CC proliferation in neutropenia, and for inducing cytokine (e.g.
CC interleukin (IL)-1 beta, IL-2, IL-6, IL-12, IL-18, TNF, interferon-alpha
CC or interferon-gamma) production (all claimed)
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
RESULT 132
ABV73938/C
ID ABV73938 standard; DNA; 18 BP.
XX
AC ABV73938;
XX
DT 13-JAN-2003 (first entry)
XX
XX CpG oligonucleotide 1758 (G3139 Genta).
DE
XX Immunostimulant; CpG; infection; allergy; asthma; cancer; anaemia;
KW thrombocytopaenia; neutropenia; antimicrobial; antiasthmatic;
KW cytostatic; antianaemic; antiallergic; haemostatic; phosphorothioate; ss.
XX
XX Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..18
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkage"
XX
FN WO200269369-A2.
XX
XX 05-SEP-2002.
XX
XX 10-DEC-2001; 2001WO-1B002888.
XX
XX 08-DEC-2000; 2000US-0254341P.
PR
XX (COLE-). COLEY PHARM GROUP LTD.
PA
XX Schetter C, Vollmer J;
XX
XX WPI; 2002-723213/78.
XX
XX New compositions comprising CpG-like immunostimulatory nucleic acids,
FT useful for treating or preventing infectious diseases, cancer, allergy,
FT asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
XX
XX Example 1; Page 88; 148pp; English.
XX
XX The present sequence is that of unmethylated CpG oligonucleotide 1758
CC (antisense ODN G3139, Genta). Oligonucleotide 1758 was used in examples
CC of the invention in which unmethylated CpG oligonucleotides were compared
CC with CpG-like nucleic acids for their immunostimulant activity. The CpG-
CC like nucleic acids had substitutions of C, G or the C and G dinucleotide
CC of CpG with e.g. methylated C for C (see ABV73935), inosine for G (see
CC ABV73937) and ZpY for CpG (see ABV73936). In these examples, most
CC methylated CpG oligonucleotides exhibited B cell stimulatory potential
CC almost to the same degree as the corresponding unmethylated sequences. An
CC exception was oligonucleotide 1812 (see ABV73939), the methylated
CC counterpart of the present sequence. Methylated CpG, Cpi and ZpY
CC oligonucleotides of the invention are useful for inducing an immune
CC response in a subject, including humans, for the treatment or prevention

CC of an infectious disease, cancer, allergy or asthma, for enhancing or
CC stimulating bone marrow proliferation in an immunodeficiency,
CC particularly in a subject undergoing chemotherapy, for enhancing
CC erythropoiesis in anaemia, for enhancing thrombopoiesis in
CC thrombocytopaenia, for enhancing neutrophil proliferation in
CC neutropenia, and for inducing cytokines (e.g. interleukin (IL)-1 beta, IL
CC -2, IL-6, IL-12, IL-18, TNF, interferon-alpha or interferon-gamma)
CC production (all claimed)
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
RESULT 133
AAL46661
ID AAL46661 standard; DNA; 18 BP.
XX
AC AAL46661;
XX
DT 05-AUG-2002 (first entry)
XX
XX Human bcl-2 mRNA PCR primer #1.
XX Human; bcl-2; cancer detection; disseminated cancer cell; cytostatic;
KW PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO2000237113-A2.
XX
XX 10-MAY-2002.
XX
XX 05-NOV-2001; 2001WO-EP012786.
XX
XX 03-NOV-2000; 2000DE-01054635.
PR 03-NOV-2000; 2000US-0245854P.
XX
XX (GIES/) GIESING M.
XX
XX Giesing M, Grill H, Boeckmann B, Suchy B;
XX WPI; 2002-426739/45.
XX
XX Clinically validating target from disseminated cancer cells by
PT determining whether status of target determined in cancer cells of
PT individuals correlates with cancer-related information about clinical
PT status of individuals.
XX
XX Example 3; Page 55; 57pp; English.
XX
XX The present invention relates to a method for the clinical validation of
CC a target from disseminated cancer cells, characterised in that for a
CC population of individuals it is determined whether a status of the target
CC determined in disseminated cancer cells of the individuals correlates
CC with at least one cancer-related information about the clinical status of
CC the individuals. The method is useful for clinically validating target
CC from disseminated cancer cells. The present sequence is a PCR primer used
XX to demonstrate the method of the invention
XX
SQ Sequence 18 BP; 3 A; 8 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 406 GAGCTCTTCAGGACGGG 423

```

Db      1 GAGCTCTCAGGACGGG 18
|||||
RESULT 134
AAL43435/C
ID AAL43435 standard; DNA; 18 BP.
XX
XX
AC AAL43435;
XX
XX 02-SEP-2002 (first entry)
DT
DE
DE Immunostimulatory oligonucleotide CpG1758.
KW Immunostimulatory oligonucleotide; ds; vaccine; adjuvant composition;
KW CpG oligonucleotide; tocol; immunoprophylaxis; immunotherapy;
KW bacterial infection; viral infection; parasitic infection; cancer;
KW allergy; atherosclerosis; Alzheimer's disease; tuberculosis; AIDS;
KW hepatitis B virus; CpG1758.
XX
XX Synthetic.
OS
XX
XX WO200232454-A1.
PN
XX
XX 25-APR-2002.
PD
XX
XX 16-OCT-2001; 2001WO-BP011985.
PF
XX
XX 18-OCT-2000; 2000GB-00035577.
PR
XX
XX (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
PA
XX Garcon N, Gerard CMG, Stephenne J;
PI
XX WPI; 2002-499992/53.
DR
XX
XX Adjuvant composition useful in vaccine composition for use in medicine,
PT comprises combination of immunostimulatory oligonucleotide and tocol.
PT
XX
XX Claim 5; Page 30; 42pp; English.
PS
XX
XX The invention relates to an adjuvant composition comprising a combination
CC of an immunostimulatory oligonucleotide (i.e. a CpG oligonucleotide) and
CC a tocol (i.e. an oil in water emulsion). The adjuvant composition of the
CC invention is useful for the treatment (e.g. immunoprophylaxis and
CC immunotherapy) of: bacterial, viral and parasitic infections; cancer;
CC allergy; atherosclerosis; Alzheimer's disease; tuberculosis; AIDS; and
CC hepatitis B virus infection. The present DNA sequence represents an
CC immunostimulatory CpG oligonucleotide of the invention
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 135
ABV74424/C
ID ABV74424 standard; DNA; 18 BP.
XX
XX
AC ABV74424;
XX
XX 13-JAN-2003 (first entry)
DT
DE
DE Immunostimulatory IL-13 oligonucleotide CpG 1758 SEQ ID NO 6.
KW Human; mouse; IL-13; IL-4; cytokine; antiinflammatory; antiasthmatic;
KW antiallergic; anthelmintic; vulnerary; cytostatic; hepatotropic; asthma;

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KW chronic obstructive pulmonary disease; COPD; interleukin 13; helminth;
XX infection; cirrhosis; ss.
OS Homo sapiens.
OS Synthetic.
XX
XX WO2002070711-A1.
PN
XX
XX 12-SEP-2002.
PD
XX
XX 01-MAR-2002; 2002WO-GB000900.
PF
XX
XX 03-MAR-2001; 2001GB-00005360.
PR
XX
XX (GLAX ) GLAXO GROUP LTD.
PA
XX Ashman C, Crowe JS, Ellis JH, Lewis AP;
PI
XX WPI; 2002-740766/80.
DR
XX
XX New isolated proteins capable of raising antibodies in humans, useful for
PT treating interleukin-13 mediated diseases, e.g. asthma, allergies,
PT helminth-infection related disorders, fibrosis or cirrhosis of the liver.
PT
XX
XX Claim 20; Page 54; 83pp; English.
PS
XX
XX The invention relates to a new isolated protein at least 30% identical to
CC a human protein comprising a polypeptide, which: (a) contains at least
CC one mutation characteristic of an analogous non-human protein; (b) is
CC capable of raising antibodies in human and is sufficiently structurally
CC similar to the human protein that the antibodies bind to both the human
CC protein and the polypeptide; and (c) is not an antibody. The proteins,
CC polynucleotides or vectors encoding them or hosts and compositions of
CC comprising the proteins are useful in medicine for the treatment of IL-13
CC mediated diseases such as asthma, chronic obstructive pulmonary disease
CC (COPD) or allergies. The polypeptides or the polynucleotides are useful
CC for the treating helminth-infection related disorders, fibrosis or
CC cirrhosis of the liver. The present sequence is that of an
CC immunostimulatory IL-13 oligonucleotide of the invention, comprising a
CC CpG dinucleotide motif
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCAGCTGGGAGA 1
RESULT 136
AAL44489/C
ID AAL44489 standard; DNA; 18 BP.
XX
XX
AC AAL44489;
XX
XX 08-NOV-2002 (first entry)
DT
DE
DE CpG motif oligonucleotide #4.
KW Vaccine; immune response; microparticle; ds; adsorbent surface;
KW poly(alpha-hydroxy acid); polyhydroxy butyric acid; polycaprolactone;
KW polyorthoester; polycyanoacrylate; detergent; submicron emulsion;
KW viral infection; bacterial infection; parasitic infection;
KW CpG oligonucleotide.
XX
XX Unidentified.
OS
XX
XX WO200226209-A2.
PN
XX
XX 04-APR-2002.
PD

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XX PF 28-SEP-2001; 2001WO-US030540.
XX PF
XX PR 28-SEP-2000; 2000US-023610SP.
XX PR 30-AUG-2001; 2001US-031590SP.
XX PA (CHIR ) CHIRON CORP.
XX PA
XX PI O'hagan D, Orten G, Donnelly JJ, Polo JM, Barnett S, Singh M;
XX PI Ulmez J, Dubensky TW;
XX DR WPI; 2002-519084/55.
XX
XX PT A microparticle to which a biologically active macromolecule is adsorbed,
XX PT for use as a vaccine composition to treat viral, bacterial or parasitic
XX PT infections, comprises a polymer microparticle, a detergent and a
XX PT submicron emulsion.
XX
XX PS Disclosure; Page 46; 100pp; English.
XX
XX CC The invention relates to a method of raising an immune response in a host
XX CC animal. The method of the invention comprises administering a
XX CC microparticle that has an adsorbent surface to which a first biologically
XX CC active macromolecule (e.g. a nucleic acid) has been adsorbed. The
XX CC microparticle comprises a polymer microparticle of poly(alpha-hydroxy
XX CC acid), a polyhydroxy butyric acid, a polycaprolactone, a polylactester,
XX CC a polycyanoacrylate, a detergent, and submicron emulsion. The method/
XX CC microparticle of the invention is useful for immunising a host animal
XX CC against viral, bacterial or parasitic infections. The present DNA
XX CC sequence represents a CpG oligonucleotide of the invention
XX
XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
XX
RESULT 137
ABQ78541/C
ID ABQ78541 standard; DNA; 18 BP.
XX AC ABQ78541;
XX
XX DT 25-NOV-2002 (first entry)
XX
XX DE Antisense oligodeoxynucleotide of the human bcl-2 gene.
XX
XX KW Antisense oligonucleotide; B cell lymphoma/leukemia-2 gene; bcl-2 gene;
XX KW cancer; lymphoma; leukemia; chemotherapeutic agent; bone marrow purging;
XX KW autoimmune disease; ss.
XX OS Homo sapiens.
XX
XX PN US6414134-B1.
XX
XX PD 02-JUL-2002.
XX
XX PF 28-NOV-2000; 2000US-00724426.
XX
XX PR 22-DEC-1988; 88US-00288692.
XX PR 21-FEB-1992; 92US-00840716.
XX PR 20-SEP-1993; 93US-00124256.
XX PR 05-JUN-1995; 95US-00465485.
XX PR 18-MAY-1998; 98US-00080285.
XX PR 17-AUG-1999; 99US-00375514.
XX
XX PA (UYPE-) UNIV PENNSYLVANIA.
XX
XX PI Reed JC;
XX
XX WPI; 2002-641579/69.
XX
XX PT Novel antisense oligonucleotide complementary to B cell lymphoma/leukemia
XX PT -2 mRNA, useful for inhibiting cancer cell growth, for treating
XX PT autoimmune disorders, and for ex vivo bone marrow purging.
XX
XX PS Disclosure; Fig 13A; 41pp; English.
XX
XX CC The present sequence represents an antisense oligonucleotide
XX CC complementary to B cell lymphoma/leukemia-2 (bcl-2) mRNA. The antisense
XX CC oligonucleotide is useful for inhibiting cancer cell (lymphoma or
XX CC leukemia cells) growth, for increasing the sensitivity of cancer cells to
XX CC cancer chemotherapeutic agents, or for inducing cancer cell death alone
XX CC or in combination with any one or more cancer chemotherapeutic agents. It
XX CC is also useful for reducing the bcl-2 gene expression or impairing bcl-2
XX CC protein function, for ex vivo bone marrow purging, for removing residual
XX CC malignant cells from the bone marrow, for inhibiting cancer of neoplastic
XX CC cell growth, and for treating autoimmune disease
XX
XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1
XX
RESULT 138
ABQ78538/C
ID ABQ78538 standard; DNA; 18 BP.
XX AC ABQ78538;
XX
XX DT 25-NOV-2002 (first entry)
XX
XX DE Antisense oligodeoxynucleotide of the human bcl-2 gene.
XX
XX KW Antisense oligonucleotide; B cell lymphoma/leukemia-2 gene; bcl-2 gene;
XX KW cancer; lymphoma; leukemia; chemotherapeutic agent; bone marrow purging;
XX KW autoimmune disease; ss.
XX OS Homo sapiens.
XX
XX PN US6414134-B1.
XX
XX PD 02-JUL-2002.
XX
XX PF 28-NOV-2000; 2000US-00724426.
XX
XX PR 22-DEC-1988; 88US-00288692.
XX PR 21-FEB-1992; 92US-00840716.
XX PR 20-SEP-1993; 93US-00124256.
XX PR 05-JUN-1995; 95US-00465485.
XX PR 18-MAY-1998; 98US-00080285.
XX PR 17-AUG-1999; 99US-00375514.
XX
XX PA (UYPE-) UNIV PENNSYLVANIA.
XX
XX PI Reed JC;
XX
XX WPI; 2002-641579/69.
XX
XX PT Novel antisense oligonucleotide complementary to B cell lymphoma/leukemia
XX PT -2 mRNA, useful for inhibiting cancer cell growth, for treating
XX PT autoimmune disorders, and for ex vivo bone marrow purging.
XX
XX PS Example 18; Col 22; 41pp; English.
XX
XX

```

CC The present sequence represents an antisense oligonucleotide
 CC complementary to B cell lymphoma/leukemia-2 (bcl-2) mRNA. The antisense
 CC oligonucleotide is useful for inhibiting cancer cell (lymphoma or
 CC leukemia cells) growth, for increasing the sensitivity of cancer cells to
 CC cancer chemotherapeutic agents, or for inducing cancer cell death alone
 CC or in combination with any one or more cancer chemotherapeutic agents. It
 CC is also useful for reducing the bcl-2 gene expression or impairing bcl-2
 CC protein function, for ex vivo bone marrow purging, for removing residual
 CC malignant cells from the bone marrow, for inhibiting cancer of neoplastic
 CC cell growth, and for treating autoimmune disease

XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 |||||
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 139
 ABN88303/C
 ID ABN88303 standard; DNA; 18 BP.

XX AC ABN88303;

XX DT 14-AUG-2002 (first entry)

XX DE Immunostimulatory oligonucleotide CpG 1758 SEQ ID NO:2.

XX KW Immunostimulatory; CpG; vaccine; cancer; cancer antigen; immunogenic;
 KW unmethylated CpG dinucleotide; cytostatic; antimicrobial; antiallergic;
 KW immunosuppressive; tumour antigen; immune response; infectious disease;
 KW allergy; autoimmune disease; saponin; ss.

XX OS Synthetic.

XX PN WO200232450-A2.

XX PD 25-APR-2002.

XX PF 16-OCT-2001; 2001WO-BP011984.

XX PR 18-OCT-2000; 2000GB-00025573.

XX PR 18-OCT-2000; 2000GB-00025574.

XX PR 18-OCT-2000; 2000US-00690921.

XX (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.

XX PI Garcon N, Gerard CMG, Stephanie J;

XX DR WPI; 2002-471376/50.

XX Immunogenic composition useful for treating patients suffering from
 PT cancer comprising cancer antigens e.g., MAGE, prostate, along with
 PT adjuvant combination comprising immunostimulatory oligonucleotide and
 PT saponin.

XX FS Claim 6; Page 33; 49pp; English.

XX The present invention describes an immunogenic composition (I)
 CC comprising: (a) a cancer antigen (CA) e.g. MAGE or prostate antigens
 CC linked to heterologous fusion partner, prostate fragments comprising at
 CC least 20 amino acids of prostate, mutated prostate, p501S, Cripito, or
 CC Her-2-neu derivatives devoid of substantial portion of Her-2 neu
 CC transmembrane domain; and (b) an adjuvant comprising saponin and
 CC immunostimulatory oligonucleotide. (I) has cytostatic, antimicrobial,
 CC antiallergic and immunosuppressive activities, and can be used in vaccine
 CC production. (I) is useful for treating a patient suffering from or
 CC susceptible to a cancer expressing a Her-2 neu or prostate
 CC specific/tumour antigen. (I) is also useful for treating a patient

CC suffering from or susceptible to a cancer expressing any of MAGE,
 CC prostate, p501S or Cripito. The formulations containing tumour antigens
 CC are useful for immunotherapeutic treatment of prostate, breast,
 CC colorectal, lung, pancreatic, renal, or melanoma cancers. (I) is useful
 CC for inducing an immune response in an individual, and for treating a
 CC mammal susceptible to or suffering from an infectious disease or cancer,
 CC or allergy or autoimmune disease. (I) is useful as a medicament. The
 CC immunostimulatory oligonucleotides (CpG) (see ABN88302 to ABN88306) and
 CC saponin and optionally a lipopolysaccharide combination are extremely
 CC potent adjuvants. The oligonucleotides in the adjuvant and vaccine
 CC compositions act synergistically with the combined saponin/
 CC lipopolysaccharide in the induction of antigen specific immune responses
 CC leading to enhanced tumour regression

XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 |||||
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 140
 AAD22796/C

ID AAD22796 standard; DNA; 18 BP.

XX AC AAD22796;

XX DT 26-FEB-2002 (first entry)

XX DE Human bcl-2 antisense oligonucleotide.

XX KW Treatment; tumour; lipid-therapeutic agent particle; sphingomyelin;
 KW distearoylphosphatidylcholine; palmitoylcholine; phosphatidylcholine; DSPC;
 KW POPC; 1,2-dioleoyl-sn-3-phosphoethanolamine; cholesterol; SM; DOPE;
 KW inflammation; bcl-2 gene; human; infectious disease; ss.

XX OS Homo sapiens.

XX PH Key Location/Qualifiers

FT modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "Optionally phosphorothioate backbone"

XX PN US6287591-B1.

XX PD 11-SEP-2001.

XX PF 14-MAY-1998; 98US-00078954.

XX PR 14-MAY-1997; 97US-00856374.

XX (INEX-) INEX PHARM CORP.

XX PI Semple SC, Klimuk SK, Harasym T, Hope MJ, Ansell SM, Cullis P;

XX PI Scherrer P, Debeyer D;

XX DR WPI; 2002-024658/03.

XX Composition useful for treatment of e.g. tumors comprises particles
 PT comprising lipid portion and a charged therapeutic agent.

XX PS Disclosure; Col 15-16; 48pp; English.

XX The invention relates to a composition useful for treatment of e.g.
 CC tumours. The composition comprises lipid-therapeutic agent particles
 CC comprising a lipid portion and a charged therapeutic agent which is
 CC encapsulated in the lipid portion. The lipid portion comprises a first
 CC lipid component selected from lipids containing a protonatable or

deprotonatable (preferably protonatable) group that has a pKa such that the lipid is in charged form at a first pH and in neutral form at a second pH. The pKa of lipid component is from 4-11. The first lipid component is further selected such that the charged form is cationic when the therapeutic agent is anionic and vice versa; the second lipid component is selected from lipids that prevent particle aggregation during lipid-therapeutic agent particles formation and which exchange out the lipid particle at a rate greater than PEG-Cer20; third lipid component is a neutral lipid selected from distearylphosphatidylcholine (DSPC), palmitoylcholeyl phosphatidylcholine (POPC), 1,2-dioleoyl-sn-3-phosphoethanolamine (DOPE) or SM (sphingomyelin) and a fourth lipid component which is cholesterol. Compositions of the invention are used for treatment or prevention of a disease caused by aberrant expression of a gene, preferably ICAM-1 (intracellular adhesion molecule-1), C-myc, c-myc, ras, raf, erb-B-2, PKC-alpha (phosphokinase C-alpha), IGF-1R (insulin growth factor 1-receptor), bcl-2, EGFR (epidermal growth factor receptor), VEGF and VEGF-R-1 (vascular endothelial growth factor receptor) in a mammal or by inflammations such as tumour or an infectious disease. The present sequence is an antisense oligonucleotide targetted to human bcl-2 gene

XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 142
ABL58454/c
ID ABL58454 standard; DNA; 18 BP.
XX AC AAL39240;
XX XX
XX DT 05-SEP-2002 (first entry)
XX DE Murine Toll-like receptor related CpG DNA SEQ ID No 115.
XX DE Murine Toll-like receptor; TLR9; TLR7; TLR8; ISNA; ds.
XX KW Unidentified.
XX OS
XX PN WO200222809-A2.
XX PD 21-MAR-2002.
XX PF 17-SEP-2001; 2001WO-US029229.
XX PR 15-SEP-2000; 2000US-0233035P.
XX PR 23-JAN-2001; 2001US-026357P.
XX PR 17-MAY-2001; 2001US-0291726P.
XX PR 22-JUN-2001; 2001US-0300210P.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Bauer S, Lipford G, Wagner H;
XX XX
XX DR WPI; 2002-393964/42.
XX PT
XX PT New isolated murine Toll-like receptor (TLR)9, TLR7, TLR8 polypeptides, useful for identifying species specificity of immunostimulatory nucleic acid and identifying immunostimulatory nucleic acids.
XX PT
XX PS Disclosure; Page 77; 195pp; English.
XX XX
XX CC The invention relates to isolated murine Toll-like receptors (TLR)9, TLR7 and TLR8 polypeptides. These polypeptides comprise fully defined sequences of 1032, 1050 or 1032 amino acids as given in specification, or their fragments, where TLR9, TLR7 and TLR8 polypeptides or their fragments have an amino acid sequence which is identical to human TLR9, TLR7 or TLR8 polypeptides or their fragment except for at least one amino acid of a murine TLR polypeptide. The isolated nucleic acids of the invention are useful for inhibiting TLR9 signalling activity in a cell. TLR7, TLR8 and TLR9 polypeptides are useful for identifying nucleic acid molecules which interact with a TLR polypeptide or its fragment. The TLR7, TLR8 or TLR9 polypeptides are also useful for identifying ISNA. The TLR7, TLR8 and TLR9 polypeptides are also useful for comparing TLR9 signalling activity of a test compound (that is not a nucleic acid, and is a polypeptide or a part of a combinatorial library of compounds) with an ISNA. The TLR7, TLR8 and TLR9 polypeptides are also useful for identifying species specificity of an ISNA. The isolated nucleic acids of the invention are useful as probes or primers. This polynucleotide sequence represents DNA relating to the isolated Toll-like receptors of

the lipid is in charged form at a first pH and in neutral form at a second pH. The pKa of lipid component is from 4-11. The first lipid component is further selected such that the charged form is cationic when the therapeutic agent is anionic and vice versa; the second lipid component is selected from lipids that prevent particle aggregation during lipid-therapeutic agent particles formation and which exchange out the lipid particle at a rate greater than PEG-Cer20; third lipid component is a neutral lipid selected from distearylphosphatidylcholine (DSPC), palmitoylcholeyl phosphatidylcholine (POPC), 1,2-dioleoyl-sn-3-phosphoethanolamine (DOPE) or SM (sphingomyelin) and a fourth lipid component which is cholesterol. Compositions of the invention are used for treatment or prevention of a disease caused by aberrant expression of a gene, preferably ICAM-1 (intracellular adhesion molecule-1), C-myc, c-myc, ras, raf, erb-B-2, PKC-alpha (phosphokinase C-alpha), IGF-1R (insulin growth factor 1-receptor), bcl-2, EGFR (epidermal growth factor receptor), VEGF and VEGF-R-1 (vascular endothelial growth factor receptor) in a mammal or by inflammations such as tumour or an infectious disease. The present sequence is an antisense oligonucleotide targetted to human bcl-2 gene

XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 141
ABL58454/c
ID ABL58454 standard; DNA; 18 BP.
XX AC ABL58454;
XX XX
XX DT 30-JUL-2002 (first entry)
XX DE CpG immunostimulatory oligonucleotide OLIGO 2.
XX DE
XX XX
XX KW Pharmaceutical; dermatological; skin; microneedle; vaccine; CpG; immunostimulatory; ss.
XX OS Synthetic.
XX PN WO200207813-A1.
XX XX
XX PD 31-JAN-2002.
XX PF 18-JUL-2001; 2001WO-EP008339.
XX PR 21-JUL-2000; 2000GB-00017999.
XX XX
XX PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
XX PA (SMIK) SMITHKLINE BEECHAM PLC.
XX PI Dalton CC, Easeman RL, Garcon N;
XX XX
XX DR WPI; 2002-189613/24.
XX XX
XX PT Pharmaceutical delivery device for rapid and efficient delivery of e.g. vaccine into or through skin comprises skin-piercing member and pharmaceutical reservoir.
XX PT
XX PS Disclosure; Page 22; 39pp; English.
XX XX
XX CC The invention relates to a pharmaceutical delivery device that contains at least one skin-piercing member comprising a solid, biodegradable reservoir containing the pharmaceutical. The device is used for delivery of vaccines into the skin. The skin patch for delivery of vaccines comprises an array of microneedles or microblades coated with a glassy

CC the invention
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 143
 ABS70564/C
 ID ABS70564 standard; DNA; 18 BP.
 XX AC ABS70564;
 DT 25-NOV-2002 (first entry)
 XX DE Dendritic cell stimulating CpG oligodeoxynucleotide #53.
 XX KW CpG; ss; dendritic cell; dendritic cell activation; cytostatic;
 XX KW antiallergic; cancer; immunotherapy; infectious disease; allergy.
 XX OS Synthetic.
 XX XN US6429199-B1.
 XX PD 06-AUG-2002.
 XX PF 13-NOV-1998; 98US-00191170.
 XX PR 15-JUL-1994; 94US-00276358.
 XX PR 07-FEB-1995; 95US-00386063.
 XX PR 30-OCT-1996; 96US-00738652.
 XX PR 30-OCT-1997; 97US-00960774.
 XX PA (IOWA) UNIV IOWA RES FOUND.
 XX PI Krieg AM, Hartmann G;
 XX WPI; 2002-689667/74.
 XX Activating a dendritic cell for cancer immunotherapy or for treating
 PT infectious or allergic disease, by contacting a dendritic cell with an
 PT isolated nucleic acid containing at least one unmethylated CpG
 PT dinucleotide.
 XX Example 6; Col 32; 52pp; English.

CC This invention relates to a novel method for activating or causing
 CC maturation of a dendritic cell. The method comprises contacting a
 CC dendritic cell with an isolated nucleic acid containing at least one
 CC unmethylated CpG dinucleotide in an amount effective to activate or cause
 CC maturation of the dendritic cell, where the activation is performed ex
 CC vivo. The method of the invention may have cytostatic or antiallergic
 CC activities. The method of the invention is useful for cancer
 CC immunotherapy or for treating an infectious disease or allergy, by
 CC administering an activated dendritic cell that express a specific cancer,
 CC microbial or allergy causing antigen, to a subject having a cancer
 CC including the cancer antigen, to a subject having an infection with a
 CC microorganism including the microbial antigen or to a subject having an
 CC allergic reaction to the allergy causing antigen, where the activated
 CC dendritic cell is prepared using the method of the invention. The method
 CC is useful for generating a high yield of dendritic cells by administering
 CC an isolated nucleic acid containing at least one unmethylated CpG
 CC dinucleotide, where the nucleic acid is 8-80 bases in length in an amount
 CC effective to activate the dendritic cells to a subject, and isolating
 CC dendritic cells from the subject. The use of CpG allows the generation of
 CC mature dendritic cells from peripheral blood within two days in a well
 CC defined system. The application of CpG for this purpose is superior to

CC granulocyte macrophage-colony stimulating factor (GM-CSF), which is
 CC currently used for this purpose. CpG oligonucleotides have a longer half
 CC life, are less expensive, and show a greater magnitude of immune effects.
 CC The present sequence represents a CpG oligonucleotide used in the method
 CC of the invention
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 144
 ABL53546/C
 ID ABL53546 standard; DNA; 18 BP.
 XX AC ABL53546;
 DT 10-JUN-2002 (first entry)
 XX DE CpR oligonucleotide.
 XX KW CpG; autoimmune disease; insulin dependent diabetes mellitus; IDDM;
 XX KW DNA immunisation; vaccine; antidiabetic; immunotherapy; gene therapy; ss.
 XX OS Synthetic.
 XX XN Key Location/Qualifiers
 FT modified_base 1..18 /tag= c
 FT /note= "phosphorothioate linkage"
 FT misc_feature 7..12 /tag= a
 FT /note= "CpG motif"
 FT misc_feature 11..16 /tag= b
 FT /note= "CpG motif"
 XX WO200216549-A2.
 XX 28-FEB-2002.
 XX 23-AUG-2001; 2001WO-IL000790.
 XX 25-AUG-2000; 2000US-0227853P.
 XX (YEDA) YEDA RES & DEV CO LTD.
 XX Cohen IR, Quintana FJ;
 XX WPI; 2002-227369/28.
 XX Treating or preventing an ongoing autoimmune disease e.g. diabetes,
 PT comprises vaccination with a DNA sequence comprising a CpG motif.
 XX Disclosure; Page 10; 53pp; English.

CC The present sequence is that of an example of a CpR oligonucleotide. The
 CC oligonucleotide includes 2 copies of a CpG motif comprising either
 CC dinucleotide CG flanked on the 5' side by 2 purines and on the 3' side by
 CC 2 pyrimidines, or the motif given in ABL53549. The oligonucleotide is
 CC synthesised with a phosphorothioate modified backbone to improve nuclease
 CC resistance. The invention relates to methods for the prevention or
 CC treatment of autoimmune disease, particularly insulin dependent diabetes
 CC mellitus (IDDM). A DNA vaccine which includes a CpG motif, such as the
 CC present sequence or the CpG oligonucleotide given in ABL53541, is used.
 CC The vaccine may also include DNA encoding an antigen associated with the
 CC autoimmune disease

XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred.No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGGCGACGCTGGGAGA 18
 |||||
 DB 18 ATGGGCGACGCTGGGAGA 1
 |||||

RESULT 145
 ABL53544/C
 ID ABL53544 standard; DNA; 18 BP.
 XX AC
 XX ABL53544;
 XX DT 10-JUN-2002 (first entry)
 XX DE
 XX KW CpG oligonucleotide.
 XX KW CpG; autoimmune disease; insulin dependent diabetes mellitus; IDDM;
 XX KW DNA immunisation; vaccine; antidiabetic; immunotherapy; gene therapy; ss.
 XX OS Synthetic.
 XX FH Key Location/Qualifiers
 XX modified_base 1..18
 XX /tag= C
 XX /note= "phosphorothioate linkage"
 XX misc_feature 7..12
 XX /tag= a
 XX /note= "CpG motif"
 XX misc_feature 13..18
 XX /tag= b
 XX /note= "CpG motif"
 XX PN WO200216549-A2.
 XX PD 28-FEB-2002.
 XX PF 23-AUG-2001; 2001WO-IL000790.
 XX PR 25-AUG-2000; 2000US-0227853P.
 XX PA (YEDA) YEDA RES & DEV CO LTD.
 XX PI Cohen IR, Quintana FJ;
 XX DR WP1; 2002-227369/28.
 XX PT Treating or preventing an ongoing autoimmune disease e.g. diabetes,
 XX PT comprises vaccination with a DNA sequence comprising a CpG motif.
 XX PS Disclosure; Page 10; 53pp; English.
 XX CC The present sequence is that of an example of a CpG oligonucleotide. The
 CC oligonucleotide includes 2 copies of a CpG motif comprising the
 CC dinucleotide CG flanked on the 5' side by 2 purines and on the 3' side by
 CC 2 pyrimidines. The oligonucleotide is synthesised with a phosphorothioate
 CC modified backbone to improve nuclease resistance. The invention relates
 CC to methods for the prevention or treatment of autoimmune disease,
 CC particularly insulin dependent diabetes mellitus (IDDM). A DNA vaccine
 CC which includes a CpG motif, such as the present sequence or the CpG
 CC oligonucleotide given in ABL53544, is used. The vaccine may also include
 CC DNA encoding an antigen associated with the autoimmune disease
 XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred.No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGGCGACGCTGGGAGA 18
 |||||
 DB 18 ATGGGCGACGCTGGGAGA 1
 |||||

RESULT 146
 ABL54169/C
 ID ABL54169 standard; DNA; 18 BP.
 XX AC
 XX ABL54169;
 XX DT 12-JUL-2002 (first entry)
 XX DE Oligonucleotide.
 XX KW B cell lymphoma/leukaemia-2; bcl-2; oncogene; antisense; lymphoma;
 KW leukaemia; colon carcinoma; rectal carcinoma; pancreatic cancer;
 KW breast cancer; ovarian cancer; prostate cancer; renal cell carcinoma;
 KW hepatoma; bile duct carcinoma; choriocarcinoma; cervical cancer;
 KW testicular cancer; lung carcinoma; bladder carcinoma; melanoma;
 KW head and neck cancer; brain cancer; cytostatic; human; gene therapy; ss.
 XX OS Homo sapiens.
 XX WO200217852-A2.
 XX PD 07-MAR-2002.
 XX PF 23-AUG-2001; 2001WO-US026414.
 XX PR 25-AUG-2000; 2000US-0227970P.
 XX PR 29-SEP-2000; 2000US-0237009P.
 XX PR 10-NOV-2000; 2000US-00709170.
 XX PA (GENT-) GENTA INC.
 XX PI Warrel RP, Klem RE, Fingert H;
 XX DR WPI; 2002-371796/40.
 XX PT Treating or preventing cancer, tumors and carcinomas, comprises
 PT administering B cell lymphoma/leukemia-2 antisense oligonucleotide at
 PT high doses for short period for time with one or more cancer
 PT therapeutics.
 XX PS Disclosure; Page 63; 64pp; English.
 XX CC The present invention is related to the use of a B cell
 CC lymphoma/leukaemia-2 (bcl-2) antisense oligonucleotide, particularly
 CC G3139 (see ABL54148), to treat and prevent bcl-2 related disorders.
 CC Administration at high doses results in significant therapeutic
 CC responses, including low toxicity, high tolerance and prolonged survival.
 CC Administration at high doses for short periods of time (less than 14
 CC days) also provides significant therapeutic responses in the treatment of
 CC cancer. The bcl-2 antisense oligomer may also be used to increase the
 CC sensitivity of a subject to cancer therapeutics, and in combination with
 CC hormone treatment or gene therapy. Conditions that may be treated or
 CC prevented include cancer of the haematopoietic system, skin, bone and
 CC soft tissue, reproductive system, genitourinary system, breast, endocrine
 CC system, brain, central nervous system, peripheral nervous system, kidney,
 CC lung, respiratory system, thorax, gastrointestinal and alimentary canal,
 CC lymph nodes, pancreas, hepatobiliary system, or cancer of unknown primary
 CC site, non-Hodgkin's lymphoma, Hodgkin's lymphoma, leukaemia, colon
 CC carcinoma, rectal carcinoma, pancreatic, breast, ovarian, prostate,
 CC cervical, testicular, head and neck or brain cancer, renal cell
 CC carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, lung
 CC carcinoma, bladder carcinoma and melanoma (all claimed). Note: The
 CC present sequence is given in the Sequence Listing from the present
 CC invention but the Seq ID No. is not referred to within the specification
 XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 147
 ABL54148/C
 ID ABL54148 standard; DNA; 18 BP.
 XX AC ABL54148;
 XX 12-JUL-2002 (first entry)
 DT Bcl-2 antisense oligonucleotide G3139.
 DE B cell lymphoma/leukaemia-2; bcl-2; oncogene; antisense; lymphoma;
 KW leukaemia; colon carcinoma; rectal carcinoma; pancreatic cancer;
 KW breast cancer; ovarian cancer; prostate cancer; renal cell carcinoma;
 KW hepatoma; bile duct carcinoma; choriocarcinoma; cervical cancer;
 KW testicular cancer; lung carcinoma; bladder carcinoma; melanoma;
 KW head and neck cancer; brain cancer; cytostatic; human; gene therapy; ss.
 XX Homo sapiens.
 OS
 XX
 XX Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /note= "the oligonucleotide includes at least 2
 FT phosphorothioate linkages"
 XX
 XX WO200217852-A2.
 XX
 XX 07-MAR-2002.
 XX
 XX 23-AUG-2001; 2001WO-US026414.
 XX
 XX 25-AUG-2000; 2000US-0227970P.
 XX 23-SEP-2000; 2000US-0237009P.
 XX 10-NOV-2000; 2000US-00709170.
 XX (GENT-) GENTA INC.
 XX Warrel RP, Klem RE, Fingert H;
 XX WPI; 2002-371796/40.
 XX
 XX Treating or preventing cancer, tumors and carcinomas, comprises
 PT administering B cell lymphoma/leukemia-2 antisense oligonucleotide at
 PT high doses for short period for time with one or more cancer
 PT therapeutics.
 XX
 XX Claim 18; Page 44; 64pp; English.

CC The present sequence is that of B cell lymphoma/leukaemia-2 (bcl-2)
 CC antisense oligonucleotide G3139. This oligonucleotide is complementary to
 CC the first 6 codons of the bcl-2 mRNA and hybridises to the respective
 CC target RNA bases. The present invention is directed to the use of bcl-2
 CC antisense oligomers, particularly G3139, to treat and prevent bcl-2
 CC related disorders. Administration at high doses results in significant
 CC therapeutic responses, including low toxicity, high tolerance and
 CC prolonged survival. Administration at high doses for short periods of
 CC time (less than 14 days) also provides significant therapeutic responses
 CC in the treatment of cancer. The bcl-2 antisense oligomer may also be used
 CC to increase the sensitivity of a subject to cancer therapeutics, and in
 CC combination with hormone treatment or gene therapy. Conditions that may
 CC be treated or prevented include cancer of the haematopoietic system,
 CC skin, bone and soft tissue, reproductive system, genitourinary system,
 CC breast, endocrine system, brain, central nervous system, peripheral
 CC nervous system, kidney, lung, respiratory system, thorax.

CC gastrointestinal and alimentary canal, lymph nodes, pancreas,
 CC hepatobiliary system, or cancer of unknown primary site, non-Hodgkin's
 CC lymphoma, Hodgkin's lymphoma, leukaemia, colon carcinoma, rectal
 CC carcinoma, pancreatic, breast, ovarian, prostate, cervical, testicular,
 CC head and neck of brain cancer, renal cell carcinoma, hepatoma, bile duct
 CC carcinoma, choriocarcinoma, lung carcinoma, bladder carcinoma and
 CC melanoma (all claimed). Examples from the invention describe the use of
 CC G3139 to treat patients with advanced malignant melanoma, hormone-
 CC refractory prostate cancer, and refractory or relapsed acute leukaemia
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 148
 ACF36817/C
 ID ACF36817 standard; DNA; 18 BP.
 XX AC ACF36817;
 XX 06-NOV-2003 (first entry)
 DT Immunostimulatory CpG oligonucleotide, SEQ ID NO:112.
 DE Human TLR3; Toll-like receptor 3; TLR3 signal transduction pathway;
 KW immunostimulant; drug screening; CpG oligonucleotide; ss.
 XX Synthetic.
 XX WO2003031573-A2.
 XX 17-APR-2003.
 XX 03-OCT-2002; 2002WO-US031460.
 XX 05-OCT-2001; 2001US-0327520P.
 XX (COLE-) COLEY PHARM GMBH.
 XX Lipford G;
 XX WPI; 2003-393438/37.
 XX
 XX Identifying an immunostimulatory compound by contacting a functional Toll
 PT -like receptor (TLR) 3 with a test compound, and detecting a test
 PT response mediated by the TLR3 signal transduction pathway.
 XX
 XX Disclosure; Page 19; 104pp; English.

CC The invention relates to a method for identifying an immunostimulatory
 CC compound which comprises contacting a functional Toll-like receptor 3
 CC (TLR3) with a test compound, and detecting a test response mediated by
 CC the TLR3 signal transduction pathway. A test compound is deemed to be
 CC immunostimulatory when the test response exceeds the negative control
 CC sequence, or equals or exceeds the reference response. The method is
 CC useful for identifying compounds that modulate TLR3 signalling activity,
 CC particularly immunostimulatory compounds. The method may also be used in
 CC screening for species specificity of an immunostimulatory compound.
 CC Sequences ACF36744-ACF36822 represent exemplary immunostimulatory CpG
 CC oligonucleotides which may be used to stimulate TLR3 signalling activity
 CC according to the invention
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGAGA 18
Db 18 ATGGCGCAGCTGGAGA 1

RESULT 149
ABX75040/C
ID ABX76040 standard; DNA; 18 BP.
XX AC ABX76040;
XX DT 31-MAR-2003 (first entry)
XX DE Immunostimulatory nucleic acid #51.
XX KW ss; immunostimulatory nucleic acid; anaemia; thrombocytopenia;
XX KW neutropenia; methylated CpG nucleic acid; T-rich nucleic acid;
XX KW poly-G nucleic acid; phosphorothioate backbone; chemotherapy;
XX KW radiation treatment; stress; red blood cell; haematopoiesis; synergistic.
XX OS Synthetic.
XX PN US2002165178-A1.
XX PD 07-NOV-2002.
XX PF 28-JUN-2001; 2001US-00895007.
XX PR 28-JUN-2000; 2000US-0214368P.
XX PA (SCHE/) SCHETTER C.
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PI Schetter C, Bratzler RL, Petersen DM;
XX DR WPI; 2003-166150/16.
XX KW Pharmaceutical composition for treatment of anemia, thrombocytopenia and
XX KW neutropenia comprises an immunostimulatory nucleic acid and a medicament
XX KW for the respective disease.
XX PS Claim 18; Page 8; 27pp; English.
XX CC The invention discloses a pharmaceutical composition comprising an
XX CC immunostimulatory nucleic acid and either an anaemia medicament,
XX CC thrombocytopenia medicament or a neutropenia medicament formulated in a
XX CC carrier. The immunostimulatory nucleic acid can be selected from a
XX CC methylated CpG nucleic acid, a T-rich nucleic acid, a poly-G nucleic acid
XX CC and/or a nucleic acid having a phosphorothioate backbone. The
XX CC compositions can be used for the treatment or prevention of anaemia,
XX CC thrombocytopenia and neutropenia in a subject preparing to undergo
XX CC chemotherapy, radiation treatment, and has received at least one dose of
XX CC chemotherapy or radiation treatment. The treatment is required due to the
XX CC effect of stress, including chemotherapy, on the formation of red blood
XX CC cells, haematopoiesis. The composition provides a synergistic effect
XX CC which permits a lower dose of the medicament to be used, thus providing
XX CC lower costs associated with using lower doses of the medicament, and
XX CC reduced chances of inducing side effects. The efficacy of the combination
XX CC is profoundly improved over the use of each of the medicaments alone. The
XX CC sequences presented in ABX7590-ABX76123 are the immunostimulatory
XX CC nucleic acids disclosed in the invention
XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGAGA 18
Db 18 ATGGCGCAGCTGGAGA 1

RESULT 151
ABX13191/C
ID ABX13191 standard; DNA; 18 BP.
XX AC ABX13191;
XX DT 15-MAY-2003 (first entry)
XX DE Antisense oligonucleotide for human bcl-2.

Db 18 ATGGCGCAGCTGGAGA 1

RESULT 150
ACA58705/C
ID ACA58705 standard; DNA; 18 BP.
XX AC ACA58705;
XX DT 10-JUN-2003 (first entry)
XX DE Gastric ulcer treatment immunostimulatory nucleic acid #51.
XX KW Gastric ulcer; ss; immunostimulant; equine gastric ulcer syndrome; EGUS;
XX KW Helicobacter pylori.
XX OS Synthetic.
XX PN US2002198165-A1.
XX PD 26-DEC-2002.
XX PF 01-AUG-2001; 2001US-00920313.
XX PR 01-AUG-2000; 2000US-0222248P.
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PI Bratzler RL, Petersen DM;
XX DR WPI; 2003-370798/35.
XX KW Prevention or treatment of gastric ulcer involves administering nucleic
XX KW acid.
XX PS Disclosure; Page 13; 45pp; English.
XX CC The invention relates to a method of prevention or treatment of gastric
XX CC ulcer comprising administering a nucleic acid to a subject in need for
XX CC treatment of gastric ulcer. A nucleic acid sample comprising
XX CC oligonucleotide 2006 was administered to a mouse model by an oral route
XX CC or a vehicle control. Colonisation of mice by Helicobacter pylori was
XX CC assessed at time points from 1 day to 1 month after treatment. The
XX CC ability of the nucleic acid to reduce H. pylori colonisation was
XX CC assessed. The method is useful for preventing or treating a gastric ulcer
XX CC on a subject e.g. human or non-human vertebrate animal including dog,
XX CC cat, horse (equine gastric ulcer syndrome, EGUS), cow, goat, sheep, pig,
XX CC rabbit, turkey, chicken, primate, rat and mouse. The method effectively
XX CC treats or prevents gastric ulcers. The present sequence represents an
XX CC immunostimulatory nucleic acid for the treatment of gastric ulcers
XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGAGA 18
Db 18 ATGGCGCAGCTGGAGA 1

RESULT 151
ABX13191/C
ID ABX13191 standard; DNA; 18 BP.
XX AC ABX13191;
XX DT 15-MAY-2003 (first entry)
XX DE Antisense oligonucleotide for human bcl-2.

KW Human; ss; antisense; bcl-2; leukaemia; tumour; cell death;
 KW drug sensitivity.

OS Homo sapiens.

XX Key Location/Qualifiers

FT modified_base 1..18

FT /*tag= a

FT /mod_base= OTHER

FT /note= "thio-modified bases"

PN CN1374088-A.

XX 16-OCT-2002.

XX 09-MAR-2001; 2001CN-00107627.

XX 09-MAR-2001; 2001CN-00107627.

XX (UYJI-) UNIV JINAN.

XX Zhang H, Lei X, Shen W;

XX WPI; 2003-157920/16.

XX New Bcl-2 gene antisense nucleic acid, useful for inhibiting expression
 of the Bcl-2 gene, promoting tumor and leukemia cell death, resisting
 leukemia and tumor drug-fast, and raising drug sensitivity.

XX Claim 1; Page 1 (claims); 10pp; Chinese.

XX The invention relates to a Bcl-2 gene antisense nucleic acid sequence of
 18 thio-modified nucleotides appearing as AEX13191. The antisense
 oligonucleotide is useful for inhibiting expression of the Bcl-2 gene,
 promoting tumor and leukaemia cell death, resisting leukaemia and
 tumours, and raising drug sensitivity. The present sequence is the
 antisense oligonucleotide of the invention

XX Sequence 18 BP; 3 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

XX Query Match 2.9%; Score 18; DB 1; Length 18;

XX Best Local Similarity 100.0%; Pred. No. 79;

XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 423 GGTGAACGGGGGAGGAT 440

DB 18 GGTGAACGGGGGAGGAT 1

RESULT 152

ID ABZ76751/c

XX ABZ76751 standard; DNA; 18 BP.

AC ABZ76751;

XX 01-APR-2000 (first entry)

XX Phosphorothioate oligonucleotide SEQ ID NO:1.

XX Phosphorothioate; salt complex; oligonucleotide synthesis; organic base;
 1,1-dioxo-1,2-dihydro-1-lambda-6-benzo(d)isothiazol-3-one; ss.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..18

FT /*tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages"

PN WO2003004512-A1.

XX 16-JAN-2003.

XX

PF

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PR

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PA

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PA

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PI

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DR

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CC

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CC

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CC

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CC

CC

CC

CC

CC

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CC

CC

CC

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SQ

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XX

XX

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QY

DB

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XX

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01-JUL-2002; 2002WO-GE003029.

03-JUL-2001; 2001US-0302717P.

(AVEC-) AVECIA BIOTECHNOLOGY INC.

(AVEC-) AVECIA LTD.

Sinha N, Zedalis WE, Miranda GK;

WPI; 2003-221573/21.

Salt complex useful for oligonucleotide synthesis comprises an organic
 base and a 1,1-dioxo-1,2-dihydro-1-lambda-6-benzo(d)isothiazol-3-one.

Example 4; Page 18; 43pp; English.

The present invention describes a salt complex (Q) comprising an organic
 base and a 1,1-dioxo-1,2-dihydro-1-lambda-6-benzo(d)isothiazol-3-one (I).
 Also described: (1) an activator (A1) solution comprising an aprotic
 organic solvent, an organic base and (I); (2) synthesis (S1) of an
 oligonucleotide using phosphoramidite chemistry involving coupling a
 nucleoside or a nascent oligonucleotide having a free hydroxy or thiol
 group (preferably a free 5'-hydroxy group) and a nucleoside
 phosphoramidite (a) (preferably a nucleoside 3'-phosphoramidite) in the
 presence of (I) or an activator comprising a mixture of (I) and an N-
 alkylimidazole (preferably N-methylimidazole); (3) condensation (B1) of
 an N-mer oligonucleotide or a nucleoside of formula (II) with the
 nucleoside phosphoramidite of formula (Ia) involving contacting (II) with
 (Ia) and (I) to form an oligonucleotide having 5'-trivalent phosphorus
 linkage of formula (III); and (4) preparation (C1) of (Q) involving
 contacting (I) with an organic base. (I) can be used as an activator in
 oligonucleotide synthesis. (I) in the presence of an organic base
 promotes phosphoramidite condensation reaction with at least equal
 efficiency as tetrazole with fewer side products. The complex is non-
 explosive, therefore safer to use than tetrazole, particularly in large-
 scale synthesis of oligonucleotide. The present sequence represents a
 phosphorothioate oligonucleotide which is used in an example from the
 present invention

Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 79;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGGCGACGCTGGGAGA 18

DB 18 ATGGGCGACGCTGGGAGA 1

RESULT 153

ACC59107/c

ID ACC59107 standard; DNA; 18 BP.

XX ACC59107;

XX 04-JUL-2003 (first entry)

XX CpG oligonucleotide 2 SEQ ID NO: 2.

CpG; pharmaceutical composition; saponin; sterol; antibacterial;
 anti-HIV; hepatotropic; virucide; protozoacide; cytostatic; nootropic;
 neuroprotective; antiallergic; antiarteriosclerotic; antimicrobial;
 vaccine; cancer; allergy; atherosclerosis; Alzheimer's disease; ds.

Unidentified.

WO2003028760-A2.

10-APR-2003.

30-SEP-2002; 2002WO-EP010931.

XX PA 01-OCT-2001; 2001GB-00023580.
 XX PA (GLAX) GLAXOSMITHKLINE BIOLOGICALS SA.
 XX PI Garcon N;
 XX DR WPI; 2003-430170/40.
 XX PT Composition useful for treating diseases due to pathogens e.g. HIV, or
 PT varicella zoster virus, comprises a saponin and a sterol formulated in a
 PT liposome.
 PS Disclosure; Page 9; 27pp; English.
 CC The invention relates to a novel pharmaceutical composition comprising a
 CC saponin and a sterol formulated in a liposome. A composition of the
 CC invention has antibacterial, anti-HIV, hepatotropic, antiviral,
 CC protozoicidal, cytostatic, nontropic, neuroprotective, antiallergic,
 CC antiarteriosclerotic, and antimicrobial activity, and works as a vaccine.
 CC The composition is useful for treating diseases due to pathogens e.g.
 CC HIV, Varicella Zoster virus, Herpes simplex virus type 1 and 2, human
 CC cytomegalovirus, Dengue virus, hepatitis A, B, C and E, respiratory
 CC syncytial virus, human papilloma virus, influenza virus, Hemophilus
 CC influenzae, Meningococcus, Salmonella, Neisseria, Borrelia, Chlamydia,
 CC Toxoplasma. The composition is also useful for treating cancer, allergy
 CC and other infectious diseases, atherosclerosis, and Alzheimer's disease.
 CC The present sequence is used in the exemplification of the invention
 XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 154
 ABZ80165/c
 ID ABZ80168 standard; DNA; 18 BP.
 AC ABZ80168;
 XX 23-MAY-2003 (first entry)
 DE Immunostimulatory oligonucleotide SEQ ID NO:40.
 XX Immunostimulation; immune response; natural killer cell; interferon;
 KW type 1 interferon; IFN; cancer; infectious disease; allergic disorder;
 KW immune related disorder; ss.
 XX Synthetic.
 OS Key Location/Qualifiers
 FH modified_base 1..18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "optionally phosphorothioate backbone"
 XX W02003015711-A2.
 XX 27-FEB-2003.
 XX 19-AUG-2002; 2002WO-US026468.
 XX 17-AUG-2001; 2001US-0313273P.
 XX 03-JUL-2002; 2002US-0393952P.
 XX (COLE-) COLEY PHARM GROUP INC.
 PA

PA (COLE-) COLEY PHARM GMBH.
 PA (IOWA) UNIV IOWA RES FOUND.
 XX Krieg AM, Vollmer J, Uhlman E;
 XX WPI; 2003-268241/26.
 XX New immunostimulatory nucleic acid, useful for preparing a composition
 XX for treating an allergic condition.
 XX Example 1; Page 42; 115pp; English.
 CC The present invention describes immunostimulatory nucleic acids of 14-100
 CC nucleotides in length comprising the formula 5' X1BCGHX2 3' (I), where X1
 CC or X2 = independently any sequence 0-10 nucleotides; D = nucleotide other
 CC than C; C = cytosine; G = guanine; H = nucleotide other than G. The
 CC immunostimulatory nucleic acid further comprises a sequence consisting of
 CC F and N positioned immediately 5' to X1 or 3' to X2 and N is a B cell
 CC neutralising sequence, where N begins with a CGG trinucleotide and is at
 CC least 10 nucleotides long and P is GC-rich palindromic containing sequence
 CC at least 10 nucleotides long. Also described: (1) a pharmaceutical
 CC composition comprising the immunostimulatory nucleic acid and a carrier;
 CC and (2) treating an allergic condition. (I) has antiallergic activity and
 CC can be used in gene therapy. (I) can be used for preparing a composition
 CC for treating a variety of immune related disorders such as cancer,
 CC infectious diseases and allergic disorders. (I) also stimulates the
 CC activation of natural killer cells and the production of type 1
 CC interferon (IFN). The present sequence represents an immunostimulatory
 CC oligonucleotide, which is used in an example from the present invention
 XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 155
 ACC59006/c
 ID ACC59006 standard; DNA; 18 BP.
 AC ACC59006;
 XX 01-JUL-2003 (first entry)
 DE Human bcl-2 antisense oligonucleotide.
 XX Human; antisense; transcobalamin receptor; intrinsic factor receptor;
 KW cytosstatic; antiviral; anti-HIV; hepatotropic; antiinflammatory;
 KW virucide; tuberculostatic; protozoacide; cancer; viral disease; ss;
 KW bcl-2.
 OS Homo sapiens.
 XX W02003025139-A2.
 XX 27-MAR-2003.
 XX 17-SEP-2002; 2002WO-US029571.
 XX 17-SEP-2001; 2001US-032821P.
 XX 13-SEP-2002; 2002US-0410627P.
 XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
 XX Collins DA, Callstrom M, Prendergast FG;
 XX WPI; 2003-430085/40.
 XX

PT Compound useful for treating e.g. cancer comprises optionally stabilized
 PT nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated
 XX to a ligand for the transcobalamin receptor or intrinsic factor receptor.
 XX
 PS Disclosure; Page 87; 156pp; English.
 XX
 CC The invention relates to a novel compound comprising an optionally
 CC stabilized nucleic acid or its analogue encoding a peptide, protein or
 CC other biological modifier, aptamer, antisense sequence, or antisense
 CC mimic conjugated directly or through a linker to a ligand for the
 CC transcobalamin receptor or intrinsic factor receptor. A compound of the
 CC invention has cytostatic, antiviral, anti-HIV, hepatotropic,
 CC antiinflammatory, virucidal, tuberculostatic, and protozoacide activity.
 CC The compounds may be useful in the manufacture of a medicament for the
 CC delivery of material that affects gene translation or gene transcription
 CC and modulates a biological process, in medical therapy. A compound is
 CC also useful for treating cancer, viral diseases such as infection caused
 CC by HIV, hepatitis (hepatitis B, hepatitis C and hepatitis D), herpes, TB,
 CC Epstein-Barr virus, malaria, influenza virus, Para influenza virus, mumps
 CC virus, adenoviruses, reoviruses, respiratory syncytial virus,
 CC rhinoviruses, polioviruses, coxsackie-viruses, echoviruses,
 CC enteroviruses, gastroenteritis viruses, rubella viruses, rubella virus,
 CC molluscum contagiosum virus, human parvovirus B19, cytomegalovirus, human
 CC papillomavirus, varicella zoster, arenaviruses or filoviruses. The
 CC present sequence is used in the exemplification of the invention
 XX
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred.No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 156
 ABX89852/C
 ID ABX89852 standard; DNA; 18 BP.
 AC ABX89852;
 XX
 DT 30-APR-2003 (first entry)
 DE Cancer medicament related immunostimulatory nucleic acid #51.
 XX
 KW Immunostimulatory nucleic acid; cancer; cancer vaccine; hormone therapy;
 KW bone cancer; brain cancer; central nervous system cancer; CNS cancer;
 KW connective tissue cancer; oesophageal cancer; eye cancer;
 KW Hodgkin's lymphoma; larynx cancer; oral cavity cancer; skin cancer;
 KW testicular cancer; allergic response; blood transfusion; infection; ss.
 XX
 OS Unidentified.
 XX
 FN US2002156033-A1.
 XX
 PD 24-OCT-2002.
 XX
 PF 05-MAR-2001; 2001US-00800266.
 XX
 PR 03-MAR-2000; 2000US-0187214P.
 XX
 PA (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 XX
 PI Bratzler RL, Petersen DM;
 XX
 DR WPI; 2003-275279/27.
 XX
 PT Treatment of a subject having, or at risk of developing cancer, involves
 PT the use of an immunostimulatory nucleic acid having a modified backbone
 PT in combination with a cancer medicament.

XX Disclosure; Page 6; 32pp; English.
 PS
 XX The invention describes a method of treating (T1) a subject having cancer
 CC involving administering an immunostimulatory nucleic acid (1) having
 CC modified backbone and a cancer medicament (M1) selected from
 CC chemotherapeutic agent, immunotherapeutic agent, cancer vaccine or
 CC hormone therapy. The poly-G nucleic acid is not conjugated to (M1) and is
 CC free of CpG and T-rich motifs. The composition is for the treatment of
 CC cancer (e.g. bone cancer, brain and CNS cancer, connective tissue cancer,
 CC oesophageal cancer, eye cancer, Hodgkin's lymphoma, larynx cancer, oral
 CC cavity cancer, skin cancer, and testicular cancer), and for preventing
 CC allergic responses in those receiving blood transfusions. It is also
 CC useful for the treatment of fungal, bacterial, parasitic and viral
 CC infections. The combination of the immunostimulatory nucleic acids and
 CC the cancer medicament is synergistic. The combination allows for the
 CC administration of higher doses of cancer medicaments without as many side
 CC effects, and allows for the administration of lower, sub-therapeutic
 CC doses of either compound, but with higher efficacy than would otherwise
 CC be achieved using such low doses. The immunostimulatory nucleic acids
 CC function by enhancement of anti-body dependent cell cytotoxicity. This
 CC mechanism provides long lasting effects of nucleic acids, thus reducing
 CC dosing regimens, improving compliance and maintenance therapy, reducing
 CC emergency situations and improving quality of life. This sequence
 CC represents an immunostimulatory nucleic acid used in the method of
 CC treating cancer described in the invention
 XX
 SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred.No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCAGCTGGGAGA 18
 DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 157
 ABZ22867/C
 ID ABZ22867 standard; DNA; 18 BP.
 AC ABZ22867;
 XX
 DT 07-APR-2003 (first entry)
 DE Phosphorothioate modified internucleotide linkage oligonucleotide 2.
 XX
 KW Phosphorothioate; locked nucleic acid; LNA; immunostimulatory;
 KW cytostatic; antimicrobial; gene therapy; pathogenic infection; cancer;
 KW ss.
 XX
 OS Synthetic.
 XX
 FN Key Location/Qualifiers
 FT modified_base 1..18
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages"
 XX
 FN WO2002102825-A2.
 XX
 PD 27-DEC-2002.
 XX
 PF 14-JUN-2002; 2002WO-GB002728.
 XX
 PR 15-JUN-2001; 2001GB-00014719.
 XX
 PA (GLAX) GLAXO GROUP LTD.
 PA Catchpole IR;
 XX
 DR WPI; 2003-157022/15.
 XX

PA (BERG/) BERG D J.
 XX Krieg AM, Berg DJ;
 XX WPI; 2003-521815/49.
 XX
 XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 PS Disclosure; Page 8; 229pp; English.
 XX
 XX The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 ATGGCGCACGCTGGGAGA 18
 DB 18 ATGGCGCACGCTGGGAGA 1
 XX
 RESULT 160
 ACDC99399/c
 ID ACD99399 standard; DNA; 18 BP.
 XX ACD99399;
 XX
 XX 25-SEP-2003 (first entry)
 XX Immunostimulatory nucleic acid #85.
 XX
 XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 XX Synthetic.
 XX
 XX US2003050268-A1.
 XX
 XX 13-MAR-2003.
 XX
 XX 29-MAR-2002; 2002US-00112653.
 XX
 XX 29-MAR-2001; 2001US-0279642P.
 XX
 XX (KRIE/) KRIEG A M.
 XX (BERG/) BERG D J.
 XX Krieg AM, Berg DJ;
 XX WPI; 2003-521815/49.
 XX
 XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX
 XX Disclosure; Page 10; 229pp; English.
 XX
 XX The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory

CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 ATGGCGCACGCTGGGAGA 18
 DB 18 ATGGCGCACGCTGGGAGA 1
 XX
 RESULT 161
 ACC58501/c
 ID ACC58501 standard; DNA; 18 BP.
 XX ACC58501;
 XX
 XX 26-AUG-2003 (first entry)
 XX Oligonucleotide ODN #9 (INX-G3139).
 XX
 XX Lipid nucleic acid; LNA; mucosal; vaccine; immunostimulant; ss.
 XX Synthetic.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= optional phosphorothioate nucleotides"
 XX WO2003039595-A2.
 XX
 XX 15-MAY-2003.
 XX
 XX 07-NOV-2002; 2002WO-CA001717.
 XX
 XX 07-NOV-2001; 2001US-0337522P.
 XX
 XX 10-MAY-2002; 2002US-0379343P.
 XX
 XX (INEX-) INEX PHARM CORP.
 XX
 XX Semple S, Klimuk S, Yuan Z;
 XX WPI; 2003-493235/46.
 XX
 XX Improved mucosal adjuvant useful in the preparation of vaccine for
 PT stimulating an immune response comprises a lipid-nucleic acid formulation
 PT containing a nucleic acid component encapsulated by a lipid.
 XX
 XX Claim 12; Page 20; 71pp; English.
 XX
 XX The present sequence is that of CpG oligodeoxynucleotide ODN #9 (INX-
 CC G3139), which is an example of an ODN that can be used in lipid-nucleic
 CC acid (LNA) formulations of the invention comprising a lipid component and
 CC a nucleic acid component. The invention is based on the discovery that
 CC such LNA formulations associated with a target antigen stimulate enhanced
 CC mucosal immune responses, especially IgA production, directed to that
 CC target antigen in vivo as compared to the target antigen alone or mixed
 CC with free or unencapsulated forms of the ODN. Claimed improved mucosal
 CC vaccines comprise an LNA formulation with at least one antigen, the LNA
 CC formulation comprising a lipid component that encapsulates the nucleic
 CC acid component, with the lipid and nucleic acid components acting
 CC synergistically to stimulate antigen-specific IgG production in a mammal
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 162
ACC58516/c
ID ACC58516 standard; DNA; 18 BP.
XX
AC ACC58516;
XX
DT 26-AUG-2003 (first entry)
XX
DE Oligonucleotide ODN #24 (hBcl-2).
XX
KW Lipid nucleic acid; LNA; mucosal; vaccine; immunostimulant; human; Bcl-2;
KW ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..18
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "OTHER= optional phosphorothioate nucleotides"
XX
PN WO2003039595-A2.
XX
PD 15-MAY-2003.
XX
PF 07-NOV-2002; 2002WO-CA001717.
XX
PR 07-NOV-2001; 2001US-0337522P.
PR 10-MAY-2002; 2002US-0379343P.
XX
PA (INEX-) INEX PHARM CORP.
XX
PI Sample S, Klimuk S, Yuan Z;
XX
DR WPI; 2003-493235/46.
XX
PT Improved mucosal adjuvant useful in the preparation of vaccine for
PT stimulating an immune response comprises a lipid-nucleic acid formulation
PT containing a nucleic acid component encapsulated by a lipid.
XX
PS Disclosure; Page 21; 71pp; English.
XX
CC The present sequence is that of oligodeoxynucleotide ODN #24 (hBcl-2) for
CC human Bcl-2. It is an example of an ODN that can be used in lipid-nucleic
CC acid (LNA) formulations of the invention comprising a lipid component and
CC a nucleic acid component. The invention is based on the discovery that
CC such LNA formulations associated with a target antigen stimulate enhanced
CC mucosal immune responses, especially IgA production, directed to that
CC target antigen in vivo as compared to the target antigen alone or mixed
CC with free or unencapsulated forms of the ODN. Claimed improved mucosal
CC vaccines comprise an LNA formulation with at least one antigen, the LNA
CC formulation comprising a lipid component that encapsulates the nucleic
CC acid component, with the lipid and nucleic acid components acting
CC synergistically to stimulate antigen-specific IgG production in a mammal
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 163
ADA24232/c
ID ADA24232 standard; DNA; 18 BP.
XX
AC ADA24232;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human bcl-2 antisense oligonucleotide SEQ ID NO:15.
XX
KW therapeutic oligonucleotide; double-stranded RNA; dsRNA; mobile protein;
KW cytostatic; immunosuppressive; virucide; anti-HIV; antibacterial;
KW cardiant; hyperproliferation; cancer; haematological; metastatic;
KW autoimmune disease; infection; endocrine; neural; cardiovascular;
KW pulmonary; reproductive system disorder; endocytosis; metabolic process;
KW murine; intracellular adhesion molecule 1; ICAM-1;
KW antisense oligonucleotide; phosphorothioate; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..18
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "optionally phosphorothioate backbone"
XX
PN WO2003069306-A2.
XX
PD 21-AUG-2003.
XX
PF 13-FEB-2003; 2003WO-US004323.
XX
PR 13-FEB-2002; 2002US-0356053P.
XX
PA (MEDB-) MEDBRIDGE INC.
XX
PI Xie D;
XX
DR WPI; 2003-646491/61.
XX
PT Treating diseases with oligonucleotides or interfering RNA, useful e.g.
PT for cancer or autoimmune diseases, covalently coupled to mobile proteins,
PT in vivo or in vitro.
XX
PS Claim 128; Page 12; 42pp; English.
XX
CC The present invention describes a method for treating a disease by
CC administering: (a) a therapeutic oligonucleotide (TON) or double-stranded
CC RNA (dsRNA) that includes a reactive group (RG) that can react with a
CC mobile protein (MP) to form a covalent conjugate of TON/dsRNA and MP; or
CC (b) TON or dsRNA already conjugated to MP through a covalent bond. Also
CC described: (i) TON of 15-30 bases that includes (i) a part that binds to
CC target RNA or DNA and (ii) RG; (2) TON of 15-30 bases that includes a
CC part that binds to target RNA or DNA and is conjugated to MP through a
CC covalent link; (3) dsRNA that includes RG; and (4) dsRNA that is
CC conjugated to MP through a covalent link. TON have cytostatic
CC immunosuppressive, virucide, anti-HIV, antibacterial and cardiant
CC activities. The method is used to treat, or prevent, hyperproliferation
CC (particularly cancers, solid or haematological, including prevention of
CC metastatic spread); autoimmune diseases; viral or bacterial infections;
CC endocrine, neural, cardiovascular, pulmonary or reproductive system
CC disorders. Also where TON or dsRNA are labelled, they can be used for
CC diagnosis and monitoring of therapy. When linked to a mobile protein,
CC TON/dsRNA have better cell entry (via endocytosis or other parts of the
CC mobile protein metabolic process) and longer therapeutic life, increased
CC from hours to weeks (the result of increased resistance to nuclease),
CC without loss of affinity for the target. In many cases immune response to
CC TON/dsRNA is also reduced, as is non-specific binding to endogenous
CC proteins. The present sequence represents a human bcl-2 antisense
CC oligonucleotide, which is a specifically claimed TON from the present

```

CC invention.
XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match      2.9%; Score 18; DB 1; Length 18;
    Best Local Similarity 100.0%; Pred. No. 79;
    Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 164
ADB36468/C
ID ADB36468 standard; DNA; 18 BP.
XX AC ADB36468;
XX DT 04-DEC-2003 (first entry)
XX DE Immunostimulatory nucleic acid #82.
XX KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX OS Synthetic.
XX US2003087848-A1.
XX PD 08-MAY-2003.
XX PF 02-FEB-2001; 2001US-00776479.
XX PR 03-FEB-2000; 2000US-0179991P.
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX WPI; 2003-657977/62.
XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX PS Disclosure; Page 6; 221pp; English.
XX CC The invention relates to a method of treating or preventing allergy or
XX CC asthma which comprises administering to a subject a poly-G nucleic acid
XX CC in an aerosol formulation. The methods and compositions of the present
XX CC invention are useful for diagnosing and/or treating asthma and allergy
XX CC especially in a hypo-responsive subject. The present sequence represents
XX CC an immunostimulatory nucleic acid of the invention.
XX SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match      2.9%; Score 18; DB 1; Length 18;
    Best Local Similarity 100.0%; Pred. No. 79;
    Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 165
ADB36431/C
ID ADB36431 standard; DNA; 18 BP.
XX AC ADB36431;
XX DT 04-DEC-2003 (first entry)
XX DE Immunostimulatory nucleic acid #46.
XX KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX OS Synthetic.
XX US2003087848-A1.
XX PD 08-MAY-2003.
XX PF 02-FEB-2001; 2001US-00776479.
XX PR 03-FEB-2000; 2000US-0179991P.
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.

```


PA (FOUR/) FOURON Y.
 XX
 PI Bratzler RL, Petersen DM, Fouron Y;
 XX
 DR WPI; 2003-657977/62.
 XX
 XX Treating and/or preventing allergy or asthma using an immunostimulatory
 PT nucleic acid alone or in combination with an asthma/allergy medicament.
 PT
 XX
 PS Disclosure; Page 6; 221pp; English.
 XX
 XX The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 168
 ADB54074
 ID ADB54074 standard; DNA; 18 BP.
 AC ADB54074;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Oligonucleotide 66 used to analyse CpG positions within genomic DNA.
 XX
 KW colon cell proliferative disorder; non methylated CpG dinucleotide;
 KW cytosinatic; cancer; adenoma; carcinoma; cytosine methylation state; ss.
 XX
 OS Unidentified.
 XX
 PN WO2003072821-A2.
 XX
 PD 04-SEP-2003.
 XX
 XX 27-FEB-2003; 2003WO-EP002035.
 PF
 PR 27-FEB-2002; 2002EP-00004551.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 PA
 PI Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;
 PI Rujan T, Schmitt A;
 XX
 DR WPI; 2003-731620/69.
 XX
 XX Detecting and differentiating between colon cell proliferative disorders
 PT associated with a gene or its regulatory regions comprises contacting a
 PT target nucleic acid in a biological sample obtained from the subject with
 PT a reagent.
 XX
 PS Claim 43; SEQ ID NO 130; 74pp; English.
 XX
 CC The invention relates to a novel method for detecting and differentiating
 CC between colon cell proliferative disorders associated with at least one
 CC gene or its regulatory regions. The method comprises contacting a target
 CC nucleic acid in a biological sample obtained from the subject with at
 CC least one reagent or a series of reagents, where the reagent or series of
 CC reagents, distinguishes between methylated and non methylated CpG
 CC dinucleotides within the target nucleic acid. The molecules of the
 CC invention demonstrate cytostatic activity whilst the method may useful
 CC for detecting and differentiating between colon cell proliferative
 CC disorders, including cancers such as colon adenoma and colon carcinoma.
 CC The PNA (peptide nucleic acid)-oligomers are useful as probes for
 CC determining cytosine methylation state or single nucleotide
 CC polymorphisms. The current sequence is that of the oligonucleotide of the
 CC invention which was used to analyse the CpG positions within the genomic
 CC DNA regions. This sequence is not shown within the specification but is
 CC taken from Wipoweb.
 XX
 SQ Sequence 18 BP; 2 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
 XX

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 79;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 387 CTTTGCCACGCTGGTGGGA 404
 Db 1 CTTTGCCACGCTGGTGGGA 18

RESULT 167
 ADB36387/C
 ID ADB36387 standard; DNA; 18 BP.
 XX
 AC ADB36387;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #1.
 XX
 KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 KW hypo-responsive subject; immunostimulatory.
 XX
 OS Synthetic.
 XX
 PN US2003087848-A1.
 XX
 PD 08-MAY-2003.
 XX
 PF 02-FEB-2001; 2001US-00776479.
 XX
 PR 03-FEB-2000; 2000US-0179991P.
 XX
 PA (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX
 PI Bratzler RL, Petersen DM, Fouron Y;
 PI
 DR WPI; 2003-657977/62.
 XX
 XX Treating and/or preventing allergy or asthma using an immunostimulatory
 PT nucleic acid alone or in combination with an asthma/allergy medicament.
 PT
 XX
 PS Disclosure; Page 5; 221pp; English.
 XX
 XX The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX
 XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 SQ

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RESULT 169
ADC24658/c
ID ADC24658 standard; DNA; 18 BP.
XX
AC ADC24658;
XX
DT 18-DEC-2003 (first entry)
XX
DE Antisense DNA #6 that can be conjugated to the carriers of invention.
XX
KW cobalamin-bound detectable; radiolabeling; infectious disease;
XX
KW cardiovascular disorder; antibiotic; antiviral agent; ss.
XX
OS Synthetic.
XX
PN WO2003026674-A1.
XX
PD 03-APR-2003.
XX
PF 30-SEP-2002; 2002WO-US031038.
XX
PR 28-SEP-2001; 2001US-0326183P.
XX
PA (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX
PI Collins DA;
XX
WPI; 2003-393314/37.
XX
Composition useful for the treatment of e.g. infectious disease,
PT comprises a cobalamin-bound detectable or therapeutic agent in
PT combination with a cobalamin transport protein.
XX
PS Example 4; SEQ ID NO 6; 97pp; English.
XX
The present invention relates to a cobalamin-bound detectable or
CC therapeutic agent in combination with a cobalamin transport protein. In
CC the manufacture of a medicament to increase the uptake of detectable
CC agent useful in radiolabeling or therapeutic agent for treatment of a
CC disorder associated with abnormal cellular proliferation, an infectious
CC disease and cardiovascular disorder; as an antibiotic or antiviral agent;
CC for transcription of a factor. The method increases efficiency of
CC vitamin B12 or vitamin B12 conjugated materials. The presents sequence
CC represents an antisense nucleotide that can be conjugated to the carriers
CC described in the present invention.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 170
ADC33583/c
ID ADC33583 standard; DNA; 18 BP.
XX
AC ADC33583;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human bcl2 antisense oligonucleotide seq id 6.
XX
KW cytostatic; gene therapy; protein kinase C alpha expression inhibitor;
XX
KW protamine-NLS peptide; cancer; bladder cancer; antisense oligonucleotide;
XX
KW bcl2; ss; human.
XX

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OS Homo sapiens.
XX
PN US2003087810-A1.
XX
PD 08-MAY-2003.
XX
PF 02-NOV-2001; 2001US-00002884.
XX
PR 02-NOV-2001; 2001US-00002884.
XX
PA (STEI/) STEIN C A.
PA (BENI/) BENIMETSKAYA L.
PA (GUZZ/) GUZZO-PERNELL N.
XX
PI Stein CA, Benimetskaya L, Guzzo-Pernell N;
XX
WPI; 2003-730068/59.
XX
New peptide delivering antisense oligonucleotides that down-regulate
PT protein expression in cells, useful for treating cancer, particularly
PT bladder cancer.
XX
Claim 23; SEQ ID NO 6; 18pp; English.
XX
The invention describes a peptide (I) comprising consecutive amino acids,
CC the sequence of which is from any of 2 protamine-NLS peptides sequences,
CC not given in the specification. The pharmaceutical compositions can be
CC administered orally, topically, buccally, pulmonarily, intramuscularly,
CC intraperitoneally, intravenously, subcutaneously, by inhalation and
CC transdermally. The methods and compositions of the present invention are
CC useful for treating cancer, particularly bladder cancer. The method
CC provides effective non-lipidic delivery of antisense oligonucleotides.
CC This sequence represents a human bcl2 antisense oligonucleotide that can
CC be delivered to a cell by conjugation to a peptide of the invention.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 171
AAD60214/c
ID AAD60214 standard; DNA; 18 BP.
XX
AC AAD60214;
XX
DT 18-DEC-2003 (first entry)
XX
DE Oligonucleotide 1758 used for activating dendritic cells.
XX
KW Dendritic cell activation; cancer immunotherapy; infectious disease;
XX
KW allergy; cell therapy; ss.
XX
OS Unidentified.
XX
PN US2003100527-A1.
XX
PD 29-MAY-2003.
XX
PF 03-JUN-2002; 2002US-00161229.
XX
PR 15-JUL-1994; 94US-00276358.
XX
PR 07-FEB-1995; 95US-00386063.
XX
PR 30-OCT-1996; 96US-00738652.
XX
PR 30-OCT-1997; 97US-00960774.
XX
PR 13-NOV-1998; 98US-00191170.
XX

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PA (IOWA ) UNIV IOWA RES FOUND.
XX
XX Krieg AM, Hartmann G;
XX
XX WPI; 2003-708674/67.
XX
XX Activating a dendritic cell useful for treating cancer, infectious
XX diseases or allergies, comprises contacting the dendritic cell with an
XX amount of an isolated nucleic acid that contains at least one
XX unmethylated CpG dinucleotide.
XX
XX Example 6; Page 18; 51pp; English.
XX
XX The invention relates to a method of activating a dendritic cell. The
XX method involves contacting the dendritic cell with an isolated nucleic
XX acid containing at least one unmethylated CpG dinucleotide, where the
XX nucleic acid is about 8-80 bases in length, in an amount that activates
XX the dendritic cell. The compositions and methods of the invention are
XX useful for cancer immunotherapy, or for treating an infectious disease
XX (e.g. viral, bacterial or fungal infections) or allergy. The invention is
XX useful in cell therapy. The present sequence is an oligonucleotide used
XX for activating dendritic cells
XX
XX Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 79;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 ATGGGCGACGCTGGGAGA 18
XX 18 ATGGGCGACGCTGGGAGA 1
XX
XX RESULT 172
XX AAL40451
XX ID AAL40451 standard; mRNA; 19 BP.
XX
XX AC AAL40451;
XX
XX DT 19-SEP-2002 (first entry)
XX
XX DE Maxizyme related Bcl-2 mRNA sequence.
XX
XX KW Enzyme; modifiable RNA cleavage activity; maxizyme-constituting RNA;
XX trans maxizyme; Bcl-2; ss.
XX
XX OS Unidentified.
XX
XX FH Key Location/Qualifiers
XX FT misc_binding 1..9
XX FT /*tag= a
XX FT /bound_moiety= "WtRz_RNA"
XX FT /note= "Forms a double-stranded region with nucleotides
XX FT 40-32 of sequence AAL40455"
XX FT misc_binding 1..9
XX FT /*tag= c
XX FT /bound_moiety= "T-MzL_RNA"
XX FT /note= "Forms a double-stranded region with nucleotides
XX FT 27-19 of sequence AAL40447"
XX FT misc_binding 1..9
XX FT /*tag= e
XX FT /bound_moiety= "B-MzL_RNA"
XX FT /note= "Forms a double-stranded region with nucleotides
XX FT 29-21 of sequence AAL40449"
XX FT misc_binding 11..19
XX FT /*tag= b
XX FT /bound_moiety= "WtRz_RNA"
XX FT /note= "Forms a double-stranded region with nucleotides 9
XX FT -1 of sequence AAL40455"
XX FT misc_binding 11..19
XX FT /*tag= d
XX FT /bound_moiety= "T-MzR_RNA"
XX FT

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FT
FT
FT misc_binding 11..19
FT /*tag= f
FT /bound_moiety= "B-MzR_RNA"
FT /note= "Forms a double-stranded region with nucleotides 9
FT -1 of sequence AAL40448"
XX
XX JP2002119283-A.
XX
XX PD 23-APR-2002.
XX
XX PP 13-OCT-2000; 2000JP-00313320.
XX
XX PR 13-OCT-2000; 2000JP-00313320.
XX
XX PA (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
XX
XX DR WPI; 2002-483792/52.
XX
XX PT A nucleic acid enzyme which has selective and effective eradicating
XX activity towards harmful cells by acquiring cleavage activity of a
XX specific target RNA by recognition of the other RNA molecule.
XX
XX PS Disclosure; Fig 3; 17pp; Japanese.
XX
XX CC The invention relates to a nucleic acid enzyme with modifiable RNA
XX cleavage activity. More specifically the invention relates to a nucleic
XX acid enzyme, trans maxizyme, which has selective and effective
XX eradicating activity towards harmful cells by acquiring cleavage activity
XX of a specific target RNA by recognition of the other RNA molecule. The
XX enzyme of the invention is useful for cleaving target RNA and is useful
XX in treating diseases caused by the target RNA. This polynucleotide
XX sequence represents the maxizyme related Bcl-2 mRNA sequence relating to
XX the invention
XX
XX SQ Sequence 19 BP; 3 A; 8 C; 7 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 2.9%; Score 18; DB 1; Length 19;
XX Best Local Similarity 94.4%; Pred. No. 85;
XX Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 190 GACCCGGTCCGCGAGACC 207
XX 2 GACCCGGTCCGCGAGACC 19
XX
XX DB
XX
XX RESULT 173
XX AAV74246/c
XX ID AAV74246 standard; DNA; 20 BP.
XX
XX AC AAV74246;
XX
XX DT 20-MAR-2003 (revised)
XX DT 15-MAR-1999 (first entry)
XX
XX DE CpG-N motif SOS-ODN 1844 DNA.
XX
XX KW CpG-N motif; immunostimulation; antigen; CpG-S motif; immunisation; ODN;
XX viral antigen; bacterial antigen; parasite; therapeutic; growth factor;
XX toxin; tumour suppressor; cytokine; apoptotic protein; interferon;
XX hormone; clotting factor; ligand; receptor; oligodeoxynucleotide; ss.
XX
XX OS Synthetic.
XX
XX PN WO9852581-A1.
XX
XX PD -26-NOV-1998.
XX
XX PF 20-MAY-1998; 98WO-US010408.
XX
XX PR 20-MAY-1997; 97US-0047209P.
XX PR 20-MAY-1997; 97US-0047233P.

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XX (OTTA-) OTTAWA CIVIC HOSPITAL LOEB RES INST.
 PA (IOWA) UNIV IOWA RES FOUND.
 PA (QIAG-) QIAGEN GMBH.
 XX
 PI Davis HL, Krieg AM, Schorr J, Wu T;
 XX WPI; 1999-059712/05.
 DR
 XX Use of neutralising CpG and stimulating CpG motifs in DNA vectors - for
 PT enhancing the immunostimulatory effect of an antigen or enhancing the
 PT expression of a therapeutic polypeptide.
 PT
 XX
 PS Example 1; Page 64; 109pp; English.
 XX
 CC AAV74237-V74253 are oligodeoxynucleotide (ODN) primers used to describe a
 CC method for enhancing the immunostimulatory effect of an antigen encoded
 CC by nucleic acid contained in a nucleic acid construct. The method
 CC involves determining the CpG-N and CpG-S motifs present in the construct,
 CC removing neutralising CpG (CpG-N) motifs and optionally inserting a
 CC stimulatory CpG (CpG-S) motifs in the construct, thereby producing a
 CC nucleic acid construct having enhanced immunostimulatory efficacy. The
 CC method can be used for immunisation against viral antigens, e.g. from
 CC hepatitis B virus (HBV), bacterial antigens or an antigen derived from a
 CC parasite. They can also be used for expression of a therapeutic
 CC polypeptide, e.g. growth factors, toxins, tumour suppressors, cytokines,
 CC apoptotic proteins, interferons, hormones, clotting factors, ligands and
 CC receptors. (Updated on 20-MAR-2003 to correct FA field.)
 XX
 SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
 XX
 Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 91;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 DB 18 ATGGCGCACGCTGGGAGA 1
 RESULT 174
 AAC65049/C
 ID AAC65049 standard; DNA; 20 BP.
 XX
 AC AAC65049;
 XX
 DT 12-FEB-2001 (first entry)
 XX
 DE Human bcl genes antisense sequence #2.
 XX
 KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
 KW protein kinase C; PKC; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2000061810-A1.
 XX
 PD 19-OCT-2000.
 XX
 PF 07-APR-2000; 2000WO-US009293.
 XX
 PR 08-APR-1999; 99US-0128377P.
 XX
 PA (OASI-) OASIS BIOSCIENCES INC.
 XX
 PI Brown BD, Riley TA;
 XX
 WPI; 2000-679502/66.
 XX
 The present invention is concerned with antisense oligonucleotides
 containing a number of degenerate bases and/or universal bases,
 and modified backbone linkages is useful to target therapeutic genes,
 preferably anti-apoptosis or chemoresistance genes.

PS Example 5; Fig 1; 32pp; English.
 XX
 CC The present invention is concerned with antisense oligonucleotides
 CC containing a number of degenerate bases and with a modified backbone
 CC which can be used to direct cleavage of target RNA molecules. The use of
 CC degenerate bases reduces the risk of immune activation following
 CC injection into animals, which causes deleterious side effects associated
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C85077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention
 XX
 SQ Sequence 20 BP; 1 A; 9 C; 4 G; 4 T; 0 U; 2 Other;
 XX
 Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 91;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 567 CCAGGATAACGGAGGCTGGG 596
 DB 20 CCAGGANAACGGNGCTGGG 1
 RESULT 175
 AAC65048/C
 ID AAC65048 standard; DNA; 20 BP.
 XX
 AC AAC65048;
 XX
 DT 12-FEB-2001 (first entry)
 XX
 DE Human bcl genes antisense sequence #1.
 XX
 KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
 KW protein kinase C; PKC; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2000061810-A1.
 XX
 PD 19-OCT-2000.
 XX
 PF 07-APR-2000; 2000WO-US009293.
 XX
 PR 08-APR-1999; 99US-0128377P.
 XX
 PA (OASI-) OASIS BIOSCIENCES INC.
 XX
 PI Brown BD, Riley TA;
 XX
 WPI; 2000-679502/66.
 XX
 Antisense oligonucleotides containing degenerate and/or universal bases,
 and modified backbone linkages is useful to target therapeutic genes,
 preferably anti-apoptosis or chemoresistance genes.

PS Example 5; Fig 1; 32pp; English.
 XX
 CC The present invention is concerned with antisense oligonucleotides
 CC containing a number of degenerate bases and with a modified backbone
 CC which can be used to direct cleavage of target RNA molecules. The use of
 CC degenerate bases reduces the risk of immune activation following
 CC injection into animals, which causes deleterious side effects associated
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C85077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention
 XX
 SQ Sequence 20 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 2 Other;
 XX
 Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 91;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 562 TGGATCCAGGATAACGGAGG 591

KW angiogenesis; metastasis; cytostatic; ss.
 XX Synthetic.
 OS WO200197843-A2.
 XX PD 27-DEC-2001.
 XX PF 22-JUN-2001; 2001WO-US020154.
 XX PR 22-JUN-2000; 2000US-0213346P.
 XX PA (IOWA) UNIV IOWA RES FOUND.
 XX PI Weiner G, Hartmann G;
 XX DR WPI; 2002-154611/20.
 XX PT Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 XX PS Disclosure; Page 289; 312pp; English.
 XX CC The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 91;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 DB 18 ATGGCGCACGCTGGGAGA 1
 RESULT 179
 ACD99395/c
 ID ACD99395 standard; DNA; 20 BP.
 XX AC ACD99395;
 XX DT 25-SEP-2003 (first entry)
 XX DE Immunostimulatory nucleic acid #81.
 XX KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX OS Synthetic.
 XX PN US2003050268-A1.
 XX PD 13-MAR-2003.
 XX PF 29-MAR-2002; 2002US-00112653.

XX 29-MAR-2001; 2001US-0279642P.
 XX (KRIE/) KRIEG A M.
 XX PA (BERG/) BERG D J.
 XX PI Krieg AM, Berg DJ;
 XX DR WPI; 2003-521815/49.
 XX PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX PS Disclosure; Page 10; 229pp; English.
 XX CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 91;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 DB 18 ATGGCGCACGCTGGGAGA 1
 RESULT 180
 ADB36464/c
 ID ADB36464 standard; DNA; 20 BP.
 XX AC ADB36464;
 XX DT 04-DEC-2003 (first entry)
 XX DE Immunostimulatory nucleic acid #78.
 XX KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 KW hypo-responsive subject; immunostimulatory.
 XX OS Synthetic.
 XX PN US2003087848-A1.
 XX PD 08-MAY-2003.
 XX PF 02-FEB-2001; 2001US-00776479.
 XX PR 03-FEB-2000; 2000US-0179991P.
 XX PA (BRAT/) BRATZLER R L.
 XX PA (PETE/) PETERSEN D M.
 XX PA (FOUR/) FOURON Y.
 XX PI Bratzler RL, Petersen DM, Fouron Y;
 XX WPI; 2003-657977/62.
 XX PT Treating and/or preventing allergy or asthma using an immunostimulatory
 PT nucleic acid alone or in combination with an asthma/allergy medicament.
 XX PS Disclosure; Page 6; 221pp; English.
 XX CC The invention relates to a method of treating or preventing allergy or

CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. NO. 91;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 Db 18 ATGGCGCACGCTGGGAGA 1
 RESULT 181
 AAC65067/C
 ID AAC65067 standard; DNA; 18 BP.
 XX AC AAC65067;
 XX 12-FEB-2001 (first entry)
 XX Human bcl genes antisense sequence #11.
 XX Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
 XX protein kinase C; PKC; PCR primer; ss.
 XX Homo sapiens.
 XX WO2000061810-A1.
 XX 19-OCT-2000.
 XX 07-APR-2000; 2000WO-US009293.
 XX 08-APR-1999; 99US-0128377P.
 XX (OAS1-) OASIS BIOSCIENCES INC.
 XX Brown BD, Riley TA;
 XX WPI; 2000-679502/66.
 XX Antisense oligonucleotides containing degenerate and/or universal bases,
 XX and modified backbone linkages is useful to target therapeutic genes,
 XX preferably anti-apoptosis or chemoresistance genes.
 XX Example 7; Fig 3; 32pp; English.
 XX The present invention is concerned with antisense oligonucleotides
 XX containing a number of degenerate bases and with a modified backbone
 XX which can be used to direct cleavage of target RNA molecules. The use of
 XX degenerate bases reduces the risk of immune activation following
 XX injection into animals, which causes deleterious side effects associated
 XX with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 XX C65077 are antisense oligonucleotides and PCR primers used in assays to
 XX demonstrate the effects of the sequences of the invention
 XX Sequence 18 BP; 3 A; 4 C; 9 G; 1 T; 0 U; 1 Other;
 Query Match 2.9%; Score 17.6; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. NO. 86;
 Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 130 CCGCGACCGGGCATCTTC 147
 Db 18 CCGCGACCGGGCATCTTC 1

RESULT 182

AAQ51956
 ID AAQ51956 standard; RNA; 17 BP.
 XX AAQ51956;
 XX 25-MAR-2003 (revised)
 XX 26-MAY-1994 (first entry)
 XX BCL-2 mRNA ribozyme cleavable nucleotide (1742).
 XX Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
 XX resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
 XX actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
 XX adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
 XX human; chronic myelogenous leukemia; CML; follicular lymphoma;
 XX B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
 XX neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
 XX hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
 XX Homo sapiens.
 XX WO9323057-A1.
 XX 25-NOV-1993.
 XX 13-MAY-1993; 93WO-US004573.
 XX 14-MAY-1992; 92US-00882822.
 XX 14-MAY-1992; 92US-00882885.
 XX 26-AUG-1992; 92US-00936110.
 XX 26-AUG-1992; 92US-00936421.
 XX 26-AUG-1992; 92US-00936422.
 XX 26-AUG-1992; 92US-00936531.
 XX 26-AUG-1992; 92US-00936532.
 XX 07-DEC-1992; 92US-00987131.
 XX 19-JAN-1993; 93US-00006122.
 XX 19-JAN-1993; 93US-00008910.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX Thompson JD, Draper KG;
 XX WPI; 1993-386203/48.
 XX New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
 XX with tumours or mRNA expressed from gene encoding multiple drug
 XX resistance.
 XX Claim 3; Fig 6; 69pp; English.
 XX The sequences given in AAQ51825-2266 represent areas of mRNAs which are
 XX associated with development or maintenance of chronic myelogenous
 XX leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
 XX lymphocytic leukemia follicular lymphoma, B-cell acute lymphocytic
 XX leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
 XX The full length mRNAs containing these target sequences, encode aberrant
 XX cellular proteins which are able to control cellular proliferation and
 XX are directly linked to a leukemic phenotype. These target sequences are
 XX identified by the ribozyme of the invention. The ribozymes is formed in a
 XX hammerhead motif, but may also be formed in the motif of a hairpin,
 XX hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
 XX may be used to inhibit the development or expression of a transformed
 XX phenotype in man and other animals by modulating expression of the
 XX corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
 XX and transformed cells elicits inhibition of the transformed state.
 XX Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
 XX mechanism of drug resistance used by transformed cells and thus enhances
 XX drug therapies for tumours. The ribozymes may also be used to study
 XX genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
 XX correct PN field.)
 XX SQ Sequence 17 BP; 2 A; 9 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 2.8%; Score 17; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 92;
 Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 284 TGGCCCTCCGCAAGCC 300
 :||||:|||||
 Db 1 UGGCCCUCCGCAAGCC 17

RESULT 183

AAV19658/c
 ID AAV19658 standard; DNA; 17 BP.

XX AC AAV19658;

XX DT 25-MAR-2003 (revised)
 XX DT 12-JUN-1998 (first entry)

XX DE Human bcl-2 antisense oligonucleotide 4.

XX KW Antisense oligonucleotide; bcl-2 gene; lymphoma; leukaemia; human;
 cancer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN US5734033-A.

XX PD 31-MAR-1998.

XX PF 24-MAR-1994; 94US-00217082.

XX PR 22-DEC-1988; 88US-00288692.

XX PR 21-FEB-1992; 92US-00840716.

XX PA (UYPE-) UNIV PENNSYLVANIA.

XX PI Reed J;

XX DR WPI; 1998-229881/20.

XX PT Anti-sense oligo:nucleotide(s) complementary to BCL-2 mRNA - useful for
 treating cancers, e.g. lymphoma(s) and some leukaemia(s).

XX PS Disclosure; Col 14; 21pp; English.

XX CC This antisense oligonucleotide is complementary to the translation
 CC initiation site of the human bcl-2 mRNA. The Bcl-2 antisense
 CC oligonucleotides are phosphorothioate derivatives and can straddle
 CC strategic sites such as the translation initiation site, donor and
 CC acceptor splicing sites, or sites for transportation or degradation.
 CC Blocking translation at such strategic sites prevents the formation of a
 CC functional bcl-2 gene product. These oligonucleotides may be used for
 CC treating cancers associated with high levels of bcl-2 gene expression,
 CC especially lymphomas and some leukaemias. (Updated on 25-MAR-2003 to
 CC correct PF field.)

XX SQ Sequence 17 BP; 1 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 92;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 GCGCACGCTGGGAGAAC 20

Db 17 GCGCACGCTGGGAGAAC 1

RESULT 184

AAV19659/c

ID AAV19659 standard; DNA; 17 BP.

XX AC AAV19659;

XX

DT 25-MAR-2003 (revised)

DT 12-JUN-1998 (first entry)

XX

DE Human bcl-2 antisense oligonucleotide 5.

XX KW Antisense oligonucleotide; bcl-2 gene; lymphoma; leukaemia; human;
 cancer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN US5734033-A.

XX PD 31-MAR-1998.

XX PF 24-MAR-1994; 94US-00217082.

XX PR 22-DEC-1988; 88US-00288692.

XX PR 21-FEB-1992; 92US-00840716.

XX PA (UYPE-) UNIV PENNSYLVANIA.

XX PI Reed J;

XX DR WPI; 1998-229881/20.

XX PT Anti-sense oligo:nucleotide(s) complementary to BCL-2 mRNA - useful for
 treating cancers, e.g. lymphoma(s) and some leukaemia(s).

XX PS Claim 6; Col 14; 21pp; English.

XX CC This antisense oligonucleotide is complementary to the translation
 CC initiation site of the human bcl-2 mRNA. The Bcl-2 antisense
 CC oligonucleotides are phosphorothioate derivatives and can straddle
 CC strategic sites such as the translation initiation site, donor and
 CC acceptor splicing sites, or sites for transportation or degradation.
 CC Blocking translation at such strategic sites prevents the formation of a
 CC functional bcl-2 gene product. These oligonucleotides may be used for
 CC treating cancers associated with high levels of bcl-2 gene expression,
 CC especially lymphomas and some leukaemias. (Updated on 25-MAR-2003 to
 CC correct PF field.)

XX SQ Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 92;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAG 17

Db 17 ATGGCGCAGCTGGGAG 1

RESULT 185

AAV86277/c

ID AAV86277 standard; DNA; 17 BP.

XX AC AAV86277;

XX DT 24-SEP-1999 (first entry)

XX DE Human bcl-2 antisense oligonucleotide primer.

XX KW Human; antisense; fusion transcript; translocation; non-oncogenic;
 KW translocation breakpoint; bcl-2; immunoglobulin; non-Hodgkin's lymphoma;
 KW follicular lymphoma; oncogenic; promoter; cellular proliferation;
 KW tumour cell; primer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN US5935937-A.

PA (GIBS/) GIESING M.
 XX Giesing M, Grill H, Boeckmann B, Suchy B;
 PI WPI; 2002-426739/45.
 DR Clinically validating target from disseminated cancer cells by
 PT determining whether status of target determined in cancer cells of
 PT individuals correlates with cancer-related information about clinical
 PT status of individuals.
 XX
 PS Example 3; Page 55; 57pp; English.
 XX
 CC The present invention relates to a method for the clinical validation of
 CC a target from disseminated cancer cells, characterised in that for a
 CC population of individuals it is determined whether a status of the target
 CC determined in disseminated cancer cells of the individuals correlates
 CC with at least one cancer-related information about the clinical status of
 CC the individuals. The method is useful for clinically validating target
 CC from disseminated cancer cells. The present sequence is a PCR primer used
 CC to demonstrate the method of the invention
 XX
 SQ Sequence 17 BP; 2 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 2.8%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 92;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 547 CGGCACCTGACACCTG 563
 DB 17 CGGCACCTGACACCTG 1
 RESULT 188
 AAC65068/c
 ID AAC65068 standard; DNA; 18 BP.
 AC AAC65068;
 XX
 DT 12-FEB-2001 (first entry)
 DE Human bcl genes antisense sequence #12.
 XX
 KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
 KW protein kinase C; PKC; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO2000061810-A1.
 PD 19-OCT-2000.
 XX
 PF 07-APR-2000; 2000WO-US009293.
 XX
 PR 08-APR-1999; 99US-0128377P.
 XX
 PA (OASI-) OASIS BIOSCIENCES INC.
 XX
 PI Brown BD, Riley TA;
 XX
 DR WPI; 2000-679502/66.
 XX
 PF 07-APR-2000; 2000WO-US009293.
 XX
 PR 08-APR-1999; 99US-0128377P.
 XX
 PA (OASI-) OASIS BIOSCIENCES INC.
 XX
 PI Brown BD, Riley TA;
 XX
 DR WPI; 2000-679502/66.
 XX
 PF Antisense oligonucleotides containing degenerate and/or universal bases,
 PT and modified backbone linkages is useful to target therapeutic genes,
 PT preferably anti-apoptosis or chemoresistance genes.
 XX
 PS Example 7; Fig 3; 32pp; English.
 XX
 CC The present invention is concerned with antisense oligonucleotides
 CC containing a number of degenerate bases and with a modified backbone
 CC which can be used to direct cleavage of target RNA molecules. The use of
 CC degenerate bases reduces the risk of immune activation following
 CC injection into animals, which causes deleterious side effects associated
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C65077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention

CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C65077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention
 XX
 SQ Sequence 18 BP; 2 A; 4 C; 9 G; 2 T; 0 U; 1 Other;
 Query Match 2.8%; Score 17; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 99;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 147 CTCCTCCGACGCCGGCA 164
 DB 18 CTCCTCCGACGCCGGCA 1
 RESULT 189
 AAC65069/c
 ID AAC65069 standard; DNA; 18 BP.
 XX
 AC AAC65069;
 XX
 DT 12-FEB-2001 (first entry)
 DE Human bcl genes antisense sequence #13.
 XX
 KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
 KW protein kinase C; PKC; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO2000061810-A1.
 PD 19-OCT-2000.
 XX
 PF 07-APR-2000; 2000WO-US009293.
 XX
 PR 08-APR-1999; 99US-0128377P.
 XX
 PA (OASI-) OASIS BIOSCIENCES INC.
 XX
 PI Brown BD, Riley TA;
 XX
 DR WPI; 2000-679502/66.
 XX
 PF Antisense oligonucleotides containing degenerate and/or universal bases,
 PT and modified backbone linkages is useful to target therapeutic genes,
 PT preferably anti-apoptosis or chemoresistance genes.
 XX
 PS Example 7; Fig 3; 32pp; English.
 XX
 CC The present invention is concerned with antisense oligonucleotides
 CC containing a number of degenerate bases and with a modified backbone
 CC which can be used to direct cleavage of target RNA molecules. The use of
 CC degenerate bases reduces the risk of immune activation following
 CC injection into animals, which causes deleterious side effects associated
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C65077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention

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XX AC AAC65065;
XX DT 12-FEB-2001 (first entry)
XX DE Human bcl genes antisense sequence #9.
XX KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
XX KW Protein Kinase C; PKC; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200061810-A1.
XX PD 19-OCT-2000.
XX PF 07-APR-2000; 2000WO-US003293.
XX PR 08-APR-1999; 99US-0128377P.
XX PA (OASI-) OASIS BIOSCIENCES INC.
XX PI Brown BD, Riley TA;
XX DR WPI; 2000-679502/66.
XX PT Antisense oligonucleotides containing degenerate and/or universal bases,
XX PT and modified backbone linkages is useful to target therapeutic genes,
XX PT preferably anti-apoptosis or chemoresistance genes.
XX PS Example 7; Fig 3; 32pp; English.
XX CC The present invention is concerned with antisense oligonucleotides
XX CC containing a number of degenerate bases and with a modified backbone
XX CC which can be used to direct cleavage of target RNA molecules. The use of
XX CC degenerate bases reduces the risk of immune activation following
XX CC injection into animals, which causes deleterious side effects associated
XX CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
XX CC C65077 are antisense oligonucleotides and PCR primers used in assays to
XX CC demonstrate the effects of the sequences of the invention
XX SQ Sequence 17 BP; 1 A; 8 C; 2 G; 5 T; 0 U; 1 Other;
Query Match 2.7%; Score 16.6; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 13 GGGAGAACGGGTACGA 29
Db 17 GGGAGAACGGGTACGA 1
RESULT 191
AAV52559/c
ID AAV52559 standard; DNA; 18 BP.
XX AC AAV52559;
XX DT 20-NOV-1998 (first entry)
XX DE Unmethylated CpG dinucleotide 1836.
XX KW Unmethylated CpG dinucleotide; immune response; bacterial meningitis;
XX KW natural killer cell activation; NK cell; Th2 response; neonatal sepsis;
XX KW pulmonary disorder; asthma; environmentally induced airway disease;
XX KW bacterial infection; endotoxaemia; therapy; cystic fibrosis;
XX KW inflammatory bowel disease; ss.
XX OS Synthetic.
XX PN WO9837919-A1.
XX PD 03-SEP-1998.

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XX 25-FEB-1998; 98WO-US003678.
XX 28-FEB-1997; 97US-0039405P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PI Schwartz DA, Krieg AM;
XX DR WPI; 1998-480941/41.
XX PT Use of nucleic acids containing an unmethylated CpG - for treating a
XX PT subject having or at risk of having an acute decrement in air flow or
XX PT inhibiting an inflammatory response.
XX PS Example 4; Page 35; 65pp; English.
XX CC This sequence represents an unmethylated CpG dinucleotide, and can be
XX CC used in the method of the invention. The method is for treating a subject
XX CC having, or at risk of having an acute decrement in air flow, comprising
XX CC administering a nucleic acid sequence containing at least one
XX CC unmethylated CpG. The nucleic acids containing an unmethylated CpG
XX CC dinucleotide affect an immune response in a subject by activating natural
XX CC killer cells (NK) or redirecting a subject's immune response from a Th2
XX CC to a Th1 response by inducing monocytic and other cells to produce Th1
XX CC cytokines. They can be used to treat pulmonary disorders having an
XX CC immunologic component, such as asthma or environmentally induced airway
XX CC disease. They can also be used to treat diseases associated with Gram-
XX CC positive bacterial infections or endotoxaemia including bacterial
XX CC meningitis, neonatal sepsis, cystic fibrosis, inflammatory bowel disease
XX CC and liver cirrhosis, Gram-negative pneumonia, Gram-negative abdominal
XX CC abscess, haemorrhagic shock, disseminated intravascular coagulation, or
XX CC an inflammatory response to lipopolysaccharide
XX SQ Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 ATGGCGCGACGCTGGAGA 18
Db 18 ATGGCGCGCGCTGGAGA 1
RESULT 192
AAV47681/c
ID AAV47681 standard; DNA; 18 BP.
XX AC AAV47681;
XX DT 20-NOV-1998 (first entry)
XX DE Unmethylated CpG dinucleotide 1835.
XX KW Unmethylated CpG dinucleotide; immune response; bacterial meningitis;
XX KW natural killer cell activation; NK cell; Th2 response; neonatal sepsis;
XX KW pulmonary disorder; asthma; environmentally induced airway disease;
XX KW bacterial infection; endotoxaemia; therapy; cystic fibrosis;
XX KW inflammatory bowel disease; ss.
XX OS Synthetic.
XX PN WO9837919-A1.
XX PD 03-SEP-1998.
XX PF 25-FEB-1998; 98WO-US003678.
XX PR 28-FEB-1997; 97US-0039405P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PD

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PI Schwartz DA, Krieg AM;
 XX WPI; 1998-480941/41.
 XX
 XX Use of nucleic acids containing an unmethylated CpG - for treating a
 PT subject having or at risk of having an acute decrement in air flow or
 PT inhibiting an inflammatory response.
 XX
 XX Claim 35; Page 27; 65pp; English.
 XX
 XX This sequence represents an unmethylated CpG dinucleotide, and can be
 CC used in the method of the invention. The method is for treating a subject
 CC having, or at risk of having an acute decrement in air flow, comprising
 CC administering a nucleic acid sequence containing at least one
 CC unmethylated CpG. The nucleic acid contains an unmethylated CpG
 CC dinucleotide affect an immune response in a subject by activating natural
 CC killer cells (NK) or redirecting a subject's immune response from a Th2
 CC to a Th1 response by inducing monocytic and other cells to produce Th1
 CC cytokines. They can be used to treat pulmonary disorders having an
 CC immunologic component, such as asthma or environmentally induced airway
 CC disease. They can also be used to treat diseases associated with Gram-
 CC positive bacterial infections or endotoxaemia including bacterial
 CC meningitis, neonatal sepsis, cystic fibrosis, inflammatory bowel disease
 CC and liver cirrhosis, Gram-negative pneumonia, Gram-negative abdominal
 CC abscess, haemorrhagic shock, disseminated intravascular coagulation, or
 CC an inflammatory response to lipopolysaccharide
 XX
 SQ Sequence 18 BP; 3 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred No. 1.1e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCGCTGGGAGA 18
 DB 18 ATGGCGCTGGGAGA 1
 RESULT 193
 AAV27733/c
 ID AAV27733 standard; DNA; 18 BP.
 XX
 AC AAV27733;
 XX
 DT 01-OCT-1998 (first entry)
 XX
 DE Immunostimulatory oligodeoxyribonucleotide of the invention.
 XX
 XX Immunostimulatory; oligodeoxyribonucleotide; ODN;
 KW unmethylated CpG dinucleotide; activate; lymphocyte; immune response;
 KW Th2; Th1; cytokine; treatment; prevention; asthma; autoimmune disease;
 KW desensitisation therapy; artificial adjuvant; antibody generation; ss.
 XX
 OS Synthetic.
 XX
 XX WO9818810-A1.
 FN
 XX
 PD 07-MAY-1998.
 XX
 PF 30-OCT-1997; 97WO-US019791.
 XX
 XX 30-OCT-1996; 96US-00738652.
 ER
 XX (IOWA) UNIV IOWA RES FOUND.
 FA
 XX Krieg AM, Kline JN;
 PI
 XX WPI; 1998-272127/24.
 DR
 XX New immunostimulatory nucleic acid molecules - which contain at least one
 PT unmethylated CpG dinucleotide, used for treating e.g. tumours, infections
 PT or autoimmune disease.
 CC

PS Disclosure; Page 49; 109pp; English.
 XX
 CC AAV27641-751 represent immunostimulatory oligodeoxyribonucleotides (ODNs)
 CC of the invention. The ODNs contain at least one unmethylated CpG
 CC dinucleotide, and have the formula: 5' N1X1CGX2N2 3', where at least one
 CC nucleotide separates consecutive CpGs, X1 is adenine, guanine, or
 CC thymine, X2 is cytosine or thymine, N1 is any nucleotide and N1N2 is 0-26
 CC bases with the provision that N1 and N2 does not contain a CCGG tetramer
 CC or more than one CCG or CCG trimer OR 5' N1X12CGX3X4N 3', where at least
 CC one nucleotide separates consecutive CpGs, X1 and X2 are selected from
 CC GpT, GpG, GpA, ApT and ApA, X3and X4 are selected from TpT or CpT, N1 is
 CC any nucleotide and N1N2 is 0-26 bases with the provision that N1 and N2
 CC does not contain a CCGG tetramer or more than one CCG or CCG trimer. The
 CC ODNs activate lymphocytes in a subject and redirect a subject's immune
 CC response from a Th2 to a Th1 (e.g. by inducing monocytic cells and other
 CC cells to produce Th1 cytokines, including IL-12, IFN-gamma and GM-CSF).
 CC The ODNs can be used to treat or prevent an asthmatic disorder.
 CC autoimmune diseases, in desensitisation therapy, as an artificial
 CC adjuvant during antibody generation in a mammal such as a mouse or a
 CC human
 XX
 SQ Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred No. 1.1e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCGCTGGGAGA 18
 DB 18 ATGGCGCGCTGGGAGA 1
 RESULT 194
 AAZ41918/c
 ID AAZ41918 standard; DNA; 18 BP.
 XX
 AC AAZ41918;
 XX
 DT 24-JAN-2000 (first entry)
 XX
 DE IL-12 secretion inducing CpG oligonucleotide 63.
 XX
 KW CpG oligonucleotide; phosphorothioate; interleukin-12; IL-12; secretion;
 KW human PBMC; immune response; cancer; HIV; bacterial disease; asthma;
 KW neoplastic disorder; jaagsiekte; B cell; NK cell; ss; cytokine;
 KW antigen presenting cell; infection; allergic disease.
 XX
 OS Synthetic.
 XX
 XX WO9951259-A2.
 PN
 XX
 PD 14-OCT-1999.
 XX
 XX 02-APR-1999; 99WO-US007335.
 XX
 XX 03-APR-1999; 98US-0080729P.
 PR
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Krieg AM, Weiner G;
 PI
 XX WPI; 1999-620169/53.
 DR
 XX Novel synergistic combinations of immunostimulatory oligonucleotides and
 PT immunopotentiating cytokines are useful for stimulating the immune
 PT system.
 XX
 XX Example 8; Page 82; 91pp; English.
 CC
 CC Sequences AAZ41856-241949 are phosphorothioate CpG oligonucleotides which
 CC are used in the invention to induce interleukin-12 (IL-12) secretion from
 CC human PBMC. The invention comprises stimulating an immune response in a
 CC subject comprising administering to a subject exposed to an antigen, an

CC immunopotentiating cytokine and an immunostimulatory CpG oligonucleotide
 CC to induce a synergistic antigen specific immune response. The methods are
 CC useful for treating cancer by stimulating an antigen specific immune
 CC response against a cancer antigen. The methods can also be used to treat
 CC neoplastic disorders in humans, including but not limited to: sarcoma,
 CC carcinoma, fibroma, lymphoma, melanoma, neuroblastoma, retinoblastoma,
 CC and glioma. The methods are also useful for treating infectious diseases,
 CC e.g. viral diseases such as HIV, bacterial diseases, and fungal diseases.
 CC The methods and compositions may also be used to treat allergic diseases, e.g. asthma. The
 CC methods and compositions may also be applied to treat cancer and tumours
 CC in non human subjects, e.g. cats and dogs. Neoplasias affecting
 CC agricultural livestock may also be treated and include leukaemia,
 CC haemangioepithelioma and bovine ocular neoplasia. Chronic, infectious,
 CC contagious diseases of sheep and goats caused by the bacterium
 CC Corynebacterium pseudotuberculosis, and contagious lung tumour of sheep
 CC caused by jaagsiekte may also be treated. CpG oligonucleotides can be
 CC useful in activating B cells, NK cells, and antigen presenting cells,
 CC such as monocytes and macrophages. CpG oligonucleotides enhance antibody
 CC dependent cellular cytotoxicity and can be used as an adjuvant in
 CC conjunction with tumour antigens to protect against a tumour challenge
 XX
 SQ Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 1.1e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 195
 AAZ47994/c
 ID AAZ47994 standard; DNA; 18 BP.

AC AAZ47994;

DT 08-MAR-2000 (first entry)

DE Immune remodeling inducing CpG oligonucleotide SEQ ID NO:72.

XX Haematopoiesis; regulation; CpG oligonucleotide; phosphorothioate;
 KW immune remodeling; thrombopoiesis; anaemia; immune system; cancer;
 KW immune response; allergic reaction; infectious disease; asthma;
 KW thrombocytopaenia; immunohaemolytic disorder; genetic disorder;
 KW haemoglobinopathy; kidney failure; chronic inflammatory disorder;
 KW rheumatoid arthritis; ss.

CS Synthetic.

PN WO9958118-A2.

PD 18-NOV-1999.

PF 14-MAY-1999; 99WO-IB001285.

XX 14-MAY-1998; 98US-0085516P.

PR 02-FEB-1999; 99US-00241653.

XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.
 PA (CPGI-) CPG IMMUNOPHARMACEUTICALS INC.

XX Wagner H, Lipford G;

PI WPI; 2000-062261/05.

XX Use of CpG containing oligonucleotides for, e.g. inducing an antigen-
 PT specific immune response.

XX Example 1; Page 66; 116pp; English.

XX The present invention describes a method using CpG containing

CC oligonucleotides (ONs) for regulating immune system remodeling and for
 CC regulating haematopoiesis. The method for inducing an antigen-specific
 CC immune response comprises: (1) administering an ON having a sequence
 CC including at least the formula (1); and (2) exposing the subject to an
 CC antigen at least 3 days after the ON is administered to the subject to
 CC produce an antigen-specific immune response: 5' X1CGX2 3' (1), where the
 CC ON = includes at least 8 nucleotides; C and G = unmethylated, and X1 and
 CC X2 = nucleotides. The method can be used for inducing an immune response
 CC against an antigen such as cells, cell extracts, proteins,
 CC polysaccharides, polysaccharide conjugates, lipids, glycolipids,
 CC carbohydrate, viral extracts, viruses, bacteria, fungi, parasites and
 CC allergens. It can be used in a subject at risk of developing cancer or an
 CC allergic reaction. It can also be used for treating an infectious
 CC disease, allergic diseases and asthma, as well as thrombocytopaenia which
 CC is drug-induced, due to an autoimmune disorder such as idiopathic
 CC thrombocytopenic purpura, or resulting from accidental or therapeutic
 CC radiation exposure. It can also be used for treating anaemia such as drug
 CC induced anaemia, immunohaemolytic disorder, genetic disorders such as
 CC haemoglobinopathy and inherited haemolytic anaemia, inadequate production
 CC despite adequate iron stores, chronic disease such as kidney failure, and
 CC chronic inflammatory disorder such as rheumatoid arthritis, or anaemia
 CC resulting from accidental or therapeutic radiation exposure. AAZ47932 to
 CC AAZ48029 represent phosphorothioate CpG oligonucleotides used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 1.1e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
 Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 196

AAZ47655/c

ID AAZ47655 standard; DNA; 18 BP.

AC AAZ47655;

DT 01-MAR-2000 (first entry)

DE Parasitic infection preventing exemplary oligonucleotide SEQ ID NO:61.

XX Immune system; immunostimulatory; parasitic infection; parasite;
 KW CpG oligonucleotide; antigen presenting cell; natural killer cell;
 KW granulocyte; malaria; helminth disease; tick; mite; ss.

CS Synthetic.

PN WO9956755-A1.

PD 11-NOV-1999.

PF 06-MAY-1999; 99WO-US009863.

XX 06-MAY-1998; 98US-0084512P.

PR (IOWA) UNIV IOWA RES FOUND.

XX (OTTA-) OTTAWA CIVIC LOEB RES INST.

PA (USNA) US SEC OF NAVY.

XX Gramzinski RA, Krieg AM, Davis HL, Hoffman SL;

PI WPI; 2000-062123/05.

XX Treating and preventing parasitic infections using CpG oligonucleotides.

PT Disclosure; Page 21; 74pp; English.

XX The present invention describes a method for treating and preventing

CC parasitic infection by administration of unmethylated CpG
CC oligonucleotides. The CpG oligonucleotides are able to stimulate the
CC innate immune system via the activation of immune cells, such as antigen
CC presenting cells, natural killer cells and granulocytes. The CpG
CC oligonucleotides and the method can be used to treat and prevent
CC parasitic diseases, such as malaria, helminth diseases, tick and mites in
CC humans, animals and poultry. The oligonucleotides may be administered in
CC conjunction with parasiticides or other therapeutic compounds after an
CC organism has been diagnosed to be infected with parasites. Diseases which
CC can be treated or prevented include those caused by Plasmodium
CC falciparum, P. ovale, P. malariae, P. vivax, P. knowlesi, Babesia
CC microti, B. divergens, Trypanosoma cruzi, T. gambiense, T. rhodesiense,
CC Schistosoma mansoni, Toxoplasma gondii, Trichinella spiralis, Leishmania
CC major, L. donovani, L. braziliensis, and L. tropica. The parasite is
CC especially capable of causing malaria. The present sequence represents a
CC parasitic infection preventing exemplary oligonucleotide sequence from
CC the present invention

XX
SQ Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 197
AAH50640/c
ID AAH50640 standard; DNA; 18 BP.
XX
AC AAH50640;

XX 22-AUG-2001 (first entry)

XX Natural killer cell lytic activity inducing oligonucleotide SEQ ID NO:72.

XX Immunostimulatory; inducing; natural killer cell; lytic activity;
KW unmethylated CpG dinucleotide; immune response; B cell proliferation;
KW Th1; immune activation; interleukin 6; IL-6; interferon gamma; IFN-gamma;
KW cytokine; ss.

XX Homo sapiens.
OS Synthetic.

XX US6239116-B1.

XX 29-MAY-2001.

XX 30-OCT-1997; 97US-00960774.

XX 30-OCT-1996; 96US-00738652.

XX (IOWA) UNIV IOWA RES FOUND.

XX (COLE-) COLEY PHARM GROUP INC.

XX (USSH) US DEPT HEALTH & HUMAN SERVICES.

XX Krieg AM, Kline JN;

XX WPI; 2001-380456/40.

XX Methods for inducing IL-6, interferon-gamma or IL-12, or stimulating
PT natural killer cell lytic activity in a human, comprise administering to
PT the subject or exposing a natural killer cell to immunostimulatory
PT nucleic acids.

XX Disclosure; Col 32; 74pp; English.

XX The present invention describes methods for inducing interleukin 6 (IL-
CC 6), interferon-gamma (IFN-gamma) or IL-12, or for stimulating natural
CC killer cell lytic activity. The methods comprise administering to the

CC subject or exposing a natural killer cell to an immunostimulatory nucleic
CC acid. Also described are: (1) inducing IL-6 in a subject comprising
CC administering to the subject to induce IL-6 in the subject the
CC immunostimulatory nucleic acid; (2) stimulating natural killer cell lytic
CC activity comprising exposing a natural killer cell to the
CC immunostimulatory nucleic acid to stimulate natural killer cell lytic
CC activity; (3) inducing interferon-gamma in a subject to treat an immune
CC system deficiency comprising administering to the subject to induce
CC interferon-gamma production, the immunostimulatory nucleic acid; and (4)
CC inducing IL-12 in a subject comprising administering to the subject the
CC immunostimulatory nucleic acid. The methods are useful for inducing IL-6,
CC interferon-gamma or IL-12, or stimulating natural killer cell lytic
CC activity in a subject, particularly a human. The methods are particularly
CC useful for modulating an immune response. AAH50571 to AAH50671 represent
CC oligonucleotide sequences used in the exemplification of the present
CC invention

XX
SQ Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 198
AAF98954/c
ID AAF98954 standard; DNA; 18 BP.
XX
AC AAF98954;

XX 12-JUN-2001 (first entry)

XX Immunostimulatory nucleic acid #70.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX Synthetic.

XX WO200122972-A2.

XX 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

XX 27-SEP-1999; 99US-0156135P.

XX 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

XX (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.

XX Disclosure; Page 40; 338pp; English.

XX The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects

CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC Th2 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone

XX SQ Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCGCTGGGAGA 1

RESULT 199
AAF98953/C
ID AAF98953 standard; DNA; 18 BP.
XX AC AAF98953;
XX DT 12-JUN-2001 (first entry)
XX DE Immunostimulatory nucleic acid #69.
XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
XX immunostimulatory; tumour; viral infection; bacterial infection;
XX fungal infection; parasitic infection; cancer; asthma;
XX infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX OS Synthetic.
XX PN WO200122972-A2.
XX PD 05-APR-2001.
XX PF 25-SEP-2000; 2000WO-US026383.
XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX PA (IOWA) UNIV IOWA RES FOUND.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Krieg AM, Schetter C, Vollmer J;
XX WPI; 2001-273485/28.
XX DR Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX PS Disclosure; Page 40; 338pp; English.
XX CC The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone

XX SQ Sequence 18 BP; 3 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 ATGGCGCAGCTGGGAGA 18
DB 18 ATGGCGCGCTGGGAGA 1

RESULT 200
AAF99277/C
ID AAF99277 standard; DNA; 18 BP.
XX AC AAF99277;
XX DT 12-JUN-2001 (first entry)
XX DE Immunostimulatory nucleic acid #393.
XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
XX immunostimulatory; tumour; viral infection; bacterial infection;
XX fungal infection; parasitic infection; cancer; asthma;
XX infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX OS Synthetic.
XX PN WO200122972-A2.
XX PD 05-APR-2001.
XX PF 25-SEP-2000; 2000WO-US026383.
XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX PA (IOWA) UNIV IOWA RES FOUND.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Krieg AM, Schetter C, Vollmer J;
XX WPI; 2001-273485/28.
XX DR Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX PS Claim 101; Page 46; 338pp; English.
XX CC The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone

XX SQ Sequence 18 BP; 3 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 ATGGCGCAGCTGGGAGA 18

XX	ABS77595;
AC	
XX	
DT	13-DEC-2002 (first entry)
XX	
DE	Angiogenesis inhibitory oligonucleotide #79.
XX	
KW	Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW	tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW	diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW	corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW	rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW	plaque neovascularisation; telangiectasia; haemophilic joint;
KW	angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW	sceleroderma; hypertrophic scar.
OS	Synthetic.
XX	
PN	WO200253141-A2.
XX	
PD	11-JUL-2002.
XX	
PF	14-DEC-2001; 2001WO-US048458.
XX	
PR	14-DEC-2000; 2000US-0255534P.
XX	
PA	(COLE-) COLEY PHARM GROUP INC.
XX	
PI	Bratzler RU;
XX	
DR	WPI; 2002-566690/60.
XX	
PT	Inhibiting angiogenesis in a subject, involves administering at least one
PT	antiangiogenic nucleic acid molecule to the subject.
XX	
PS	Claim 2; Page 21; 276pp; English.
XX	
CC	The invention relates to inhibiting angiogenesis in a subject, comprising
CC	administering at least one antiangiogenic nucleic acid molecule. Also
CC	included is a kit comprising a first container housing the antiangiogenic
CC	nucleic acids, and instructions for administering them to a subject
CC	having a condition characterised by unwanted angiogenesis. The method is
CC	useful for inhibiting angiogenesis associated with solid tumour growth,
CC	tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC	diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC	corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC	rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC	neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC	wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC	hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX	acid of the invention
XX	
SQ	Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
	Query Match 2.7%; Score 16.4; DB 1; Length 18;
	Best Local Similarity 94.4%; Pred. No. 1.1e-02;
	Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1 ATGGCGGCGCTGGGAGA 18
DB	18 ATGGCGGCGCTGGGAGA 1
RESULT 203	
ABS77594/c	
ID	ABS77594 standard; DNA; 18 BP.
XX	
AC	ABS77594;
XX	
XX	
DT	13-DEC-2002 (first entry)
XX	
DE	Angiogenesis inhibitory oligonucleotide #78.
XX	


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KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
OS Synthetic.
XX
XX WO200253141-A2.
XX
XX 11-JUL-2002.
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX
XX WPI; 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 21; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
XX
XX Sequence 18 BP; 3 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 2.7%; Score 16.4; DB 1; Length 18;
XX Best Local Similarity 94.4%; Pred. No. 1.1e+02;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 204
ABL39318/c
ID ABL39318 standard; DNA; 18 BP.
XX
XX ABL39318;
XX
XX 16-APR-2002 (first entry)
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 750.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..18
XX
XX WO200197843-A2.

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FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX WPI; 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX
XX Disclosure; Page 287; 312pp; English.
XX
XX The present invention relates to methods for treating or preventing
XX cancer, involving administering to a subject having or at risk of
XX developing cancer immunostimulatory nucleic acids that induce expression
XX of cell surface antigens and antibodies. The methods are useful for
XX treating or preventing cancer such as basal cell carcinoma, bladder
XX cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX breast cancer, cervical cancer, colon and rectum cancer, connective
XX tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
XX cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
XX Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX present sequence is an immunostimulatory oligonucleotide described in the
XX exemplification of the invention
XX
XX Sequence 18 BP; 3 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 2.7%; Score 16.4; DB 1; Length 18;
XX Best Local Similarity 94.4%; Pred. No. 1.1e+02;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 205
ABL39319/c
ID ABL39319 standard; DNA; 18 BP.
XX
XX ABL39319;
XX
XX 16-APR-2002 (first entry)
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 751.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..18
XX
XX /*tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.

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XX PD 27-DEC-2001.
XX PF 22-JUN-2001; 2001WO-US020154.
XX PR 22-JUN-2000; 2000US-0213346P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PI Weiner G, Hartmann G;
XX DR WPI; 2002-154611/20.
XX PT Treating or preventing cancer, such as basal cell carcinoma, comprises
XX PT administering immunostimulatory nucleic acids that induce expression of
XX PT cell surface antigens and antibodies to a subject having or at risk of
XX PT developing cancer.
XX PS Disclosure; Page 287; 312pp; English.
XX CC The present invention relates to methods for treating or preventing
XX CC cancer, involving administering to a subject having or at risk of
XX CC developing cancer immunostimulatory nucleic acids that induce expression
XX CC of cell surface antigens and antibodies. The methods are useful for
XX CC treating or preventing cancer such as basal cell carcinoma, bladder
XX CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX CC breast cancer, cervical cancer, colon and rectum cancer, connective
XX CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
XX CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX CC present sequence is an immunostimulatory oligonucleotide described in the
XX CC exemplification of the invention
XX SQ Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCGCTGGGAGA 18
DB 18 ATGGCGCGCTGGGAGA 1

RESULT 206
ABL39321/c
ID ABL39321 standard; DNA; 18 BP.
AC ABL39321;
XX 16-APR-2002 (first entry)
XX DE Immunostimulatory nucleic acid SEQ ID NO: 753.
XX KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..18
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone"
XX PN WO200197843-A2.
XX PD 27-DEC-2001.
XX PF 22-JUN-2001; 2001WO-US020154.
XX PT New isolated murine Toll-like receptor (TLR)9, TLR7, TLR8 polypeptides,

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XX 22-JUN-2000; 2000US-0213346P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PI Weiner G, Hartmann G;
XX DR WPI; 2002-154611/20.
XX PT Treating or preventing cancer, such as basal cell carcinoma, comprises
XX PT administering immunostimulatory nucleic acids that induce expression of
XX PT cell surface antigens and antibodies to a subject having or at risk of
XX PT developing cancer.
XX PS Disclosure; Page 288; 312pp; English.
XX CC The present invention relates to methods for treating or preventing
XX CC cancer, involving administering to a subject having or at risk of
XX CC developing cancer immunostimulatory nucleic acids that induce expression
XX CC of cell surface antigens and antibodies. The methods are useful for
XX CC treating or preventing cancer such as basal cell carcinoma, bladder
XX CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX CC breast cancer, cervical cancer, colon and rectum cancer, connective
XX CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
XX CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX CC present sequence is an immunostimulatory oligonucleotide described in the
XX CC exemplification of the invention
XX SQ Sequence 18 BP; 3 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCGCTGGGAGA 18
DB 18 ATGGCGCTAGCTGGGAGA 1

RESULT 207
AAL39238/c
ID AAL39238 standard; DNA; 18 BP.
XX AC AAL39238;
XX 05-SEP-2002 (first entry)
XX DE Murine Toll-like receptor related CpG DNA SEQ ID No 113.
XX KW Murine Toll-like receptor; TLR9; TLR7; TLR8; ISNA; ds.
XX OS Unidentified.
XX PN WO200222809-A2.
XX PD 21-MAR-2002.
XX PF 17-SEP-2001; 2001WO-US029229.
XX PR 15-SEP-2000; 2000US-0233035P.
XX PR 23-JAN-2001; 2001US-0263657P.
XX PR 17-MAY-2001; 2001US-0291726P.
XX PR 22-JUN-2001; 2001US-0300210P.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Bauer S, Lipford G, Wagner H;
XX DR WPI; 2002-393964/42.
XX PT New isolated murine Toll-like receptor (TLR)9, TLR7, TLR8 polypeptides,

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PS Disclosure; Page 18; 104pp; English.

XX The invention relates to a method for identifying an immunostimulatory compound which comprises contacting a functional Toll-like receptor 3 (TLR3) with a test compound, and detecting a test response mediated by the TLR3 signal transduction pathway. A test compound is deemed to be immunostimulatory when the test response exceeds the negative control sequence, or equals or exceeds the reference response. The method is useful for identifying compounds that modulate TLR3 signalling activity, particularly immunostimulatory compounds. The method may also be used in screening for species specificity of an immunostimulatory compound.

CC Sequences ACF36744-ACF36822 represent exemplary immunostimulatory CpG oligonucleotides which may be used to stimulate TLR3 signalling activity according to the invention

XX Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGGCGCACGCTGGGAGA 18
||||| |||||||
Db 18 ATGGGCGCGCTGGGAGA 1

RESULT 210
ABZ10531
ID ABZ10531 standard; DNA; 18 BP.
XX AC ABZ10531;
XX AC ABZ10531;
DT 16-JAN-2003 (first entry)
XX Haematopoietic cell proliferation disorder related oligonucleotide #671.
DE Human; haematopoietic cell proliferation disorder; cytostatic;
XX gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW cytosine methylation state; probe; primer; ss.
XX Homo sapiens.
OS Synthetic.
XX
XX WO200277272-A2.
PN
XX
XX 03-OCT-2002.
PD
XX 26-MAR-2002; 2002WO-EP003401.
PF
XX 26-MAR-2001; 2001US-0278333P.
PR
XX (EPIG-) EPIGENOMICS AG.
PA
XX Berlin K, Braun A, Dietler J, Guetig D, Howe A, Mueller J;
PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu B;
PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;
PI Schwope I, Ziebarth H;
XX WPI; 2003-018942/01.
DR
XX Detecting and differentiating between haematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.

PS Claim 15; Page 48; 117pp; English.

XX The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated CpG dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118

CC represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention can be used: for differentiating healthy haematopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute lymphocytic leukaemia and acute myelogenous leukaemia; as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related DNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between subclasses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders allowing for improved and informed treatment of patients

XX Sequence 18 BP; 4 A; 1 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 AGGGGTACGAGTGGGAT 93
||||| |||||||
Db 1 AGGGGTACGAGTGGGAT 18

RESULT 211
ABT16737/C
ID ABT16737 standard; DNA; 18 BP.
XX AC ABT16737;
XX AC ABT16737;
DT 03-APR-2003 (first entry)
XX bcl-2 PCR primer SEQ ID No 99.
DE Anti-tumour; DNazyme; bcl-2 Gene; tumour; malignant; chemotherapy; radiation therapy; enzyme; PCR; primer; ss.
KW Unidentified.
XX WO200299090-A1.
PN 12-DEC-2002.
PD 07-JUN-2002; 2002WO-AU000739.
PF 07-JUN-2001; 2001AU-00005527.
PR (JOHJ) JOHNSON & JOHNSON RES PTY LTD.
XX Sun L, Wang L, Turner RJ, Saravolac EG, Dass CR;
XX WPI; 2003-140617/13.
DR Novel DNazyme useful for treating tumors, and for enhancing the sensitivity of malignant or virus infected cells to therapy, comprises a catalytic domain and binding domain contiguous to the catalytic domain.

PS Example 1; Page 16; 67pp; English.

XX The invention relates to a DNazyme which specifically cleaves mRNA transcribed from a member of the bcl-2 gene family. The DNazymes comprise a catalytic domain, binding domains contiguous with the 5' and 3' end of the catalytic domain, and therefore hybridise with, the two regions immediately flanking the purine residue of the cleavage site within the bcl-2 gene family mRNA, at which DNazyme-catalysed cleavage is desired. A pharmaceutical composition comprising a DNazyme of the invention is useful for treating tumours in a subject, and for enhancing the sensitivity of malignant or virus infected cells infected cells to therapy. The DNazymes are useful in diagnostics, therapeutics, prophylaxis, research agents and in kits. The DNazymes are also useful

CC for increasing the susceptibility of tumour cells to anti-tumour
CC therapies such as chemotherapy and radiation therapy. This polynucleotide
CC sequence represents a bcl-2 PCR primer of the invention

XX Sequence 18 BP; 2 A; 2 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 169 CCCATCCAGCGCATCC 186
Db 18 CCCATACAGCGCATCC 1

RESULT 212

ACD91427/c
ID ACD91427 standard; DNA; 18 BP.

XX ACD91427;

DT 22-SEP-2003 (first entry)

DE Immunostimulatory CpG containing oligonucleotide #30.

XX CpG island; ss; HIV infection; gene therapy; vaccine; B-cell;

KW immunostimulatory; adjuvant.

XX Synthetic.

OS US2003050263-A1.

PN 13-MAR-2003.

XX 16-AUG-2001; 2001US-00931583.

XX 15-JUL-1994; 94US-00276358.

PR 07-FEB-1995; 95US-00386063.

PR 08-OCT-1993; 99US-00415142.

XX (IOWA) UNIV IOWA RES FOUND.

PA Krieg AM, Klinman D, Steinberg AD;

PI WPI; 2003-512356/48.

DR Treating a subject infected with HIV by administering a CpG nucleic acid.

XX Disclosure; Page 6; 22pp; English.

PS The invention relates to treating a subject infected with HIV comprising
CC administering a CpG nucleic acid (e.g. an adjuvant type CpG
CC oligonucleotide, an immunostimulatory CpG oligonucleotide or a B cell
CC stimulatory CpG oligonucleotide). The CpG are used as gene therapy
CC vaccines to treat a subject infected with HIV. The present sequence is an
CC immunostimulatory CpG oligonucleotide

XX Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCGCTGGGAGA 18
Db 18 ATGGCGCAGCGCTGGGAGA 1

RESULT 213

ACD99387/c

ID ACD99387 standard; DNA; 18 BP.

XX ACD99387;

XX

DT 25-SEP-2003 (first entry)

DE Immunostimulatory nucleic acid #73.

XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;

KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;

KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;

KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.

OS Synthetic.

PN US2003050268-A1.

PD 13-MAR-2003.

XX 29-MAR-2002; 2002US-00112653.

XX 29-MAR-2001; 2001US-0279642P.

XX (KRIE/) KRIEG A M.

PA (BERG/) BERG D J.

XX Krieg AM, Berg DJ;

PI WPI; 2003-521815/49.

XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,

XX allergic contact dermatitis, latex dermatitis or inflammatory bowel

XX disease by administering an immunostimulatory nucleic acid.

PS Disclosure; Page 10; 22pp; English.

CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g. ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid

XX Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 1.1e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCGCTGGGAGA 18

Db 18 ATGGCGCAGCGCTGGGAGA 1

RESULT 214

ACD99707/c

ID ACD99707 standard; DNA; 18 BP.

XX ACD99707;

XX 25-SEP-2003 (first entry)

DE Immunostimulatory nucleic acid #393.

XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;

KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;

KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;

KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.

OS Synthetic.

PN US2003050268-A1.

PD 13-MAR-2003.

XX 29-MAR-2002; 2002US-00112653.
 XX 29-MAR-2001; 2001US-0279642P.
 XX (KRIE/) KRIEG A. M.
 XX (BERG/) BERG D. J.
 XX Krieg AM, Berg DJ;
 XX WPI; 2003-521815/49.
 XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX Disclosure; Page 19; 229pp; English.
 XX The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX Sequence 18 BP; 3 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
 XX Query Match 2.7%; Score 16.4; DB 1; Length 18;
 XX Best Local Similarity 94.4%; Pred. No. 1.1e+02;
 XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 Db 18 ATGGCGTACGCTGGGAGA 1
 RESULT 215
 ACD99386/C
 ID ACD99386 standard; DNA; 18 BP.
 AC ACD99386;
 XX 25-SEP-2003 (first entry)
 XX Immunostimulatory nucleic acid #72.
 XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX Synthetic.
 XX US2003050268-A1.
 XX 13-MAR-2003.
 XX 29-MAR-2002; 2002US-00112653.
 XX 29-MAR-2001; 2001US-0279642P.
 XX (KRIE/) KRIEG A. M.
 XX (BERG/) BERG D. J.
 XX Krieg AM, Berg DJ;
 XX WPI; 2003-521815/49.
 XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.

XX Disclosure; Page 10; 229pp; English.
 XX The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX Sequence 18 BP; 3 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
 XX Query Match 2.7%; Score 16.4; DB 1; Length 18;
 XX Best Local Similarity 94.4%; Pred. No. 1.1e+02;
 XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 Db 18 ATGGCGCTCGCTGGGAGA 1
 RESULT 216
 ADB36779/C
 ID ADB36779 standard; DNA; 18 BP.
 XX ADB36779;
 XX 04-DEC-2003 (first entry)
 XX Immunostimulatory nucleic acid #393.
 XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 KW hypo-responsive subject; immunostimulatory.
 XX Synthetic.
 XX US2003087848-A1.
 XX 08-MAY-2003.
 XX 02-FEB-2001; 2001US-00776479.
 XX 03-FEB-2000; 2000US-0179991P.
 XX (BRAT/) BRATZLER R L.
 XX (PETE/) PETERSEN D M.
 XX (FOUR/) FOURON Y.
 XX Bratzler RL, Petersen DM, Fouron Y;
 XX WPI; 2003-657977/62.
 XX Treating and/or preventing allergy or asthma using an immunostimulatory
 PT nucleic acid alone or in combination with an asthma/allergy medicament.
 XX Disclosure; Page 11; 221pp; English.
 XX The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX Sequence 18 BP; 3 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
 XX Query Match 2.7%; Score 16.4; DB 1; Length 18;
 XX Best Local Similarity 94.4%; Pred. No. 1.1e+02;
 XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18

```

Db      18 ATGGCGTACGCTGGGAGA 1
||||| ||||| ||||| ||||| |||||
RESULT 217
ADB36456/c
ID ADB36456 standard; DNA; 18 BP.
XX
AC ADB36456;
XX
DT 04-DEC-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #70.
XX
ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
OS Synthetic.
XX
PN US2003087848-A1.
XX
PD 08-MAY-2003.
XX
PF 02-FEB-2001; 2001US-00776479.
XX
PR 03-FEB-2000; 2000US-0179991P.
XX
PA (BRAT/) BRATZLER R L.
(PETE/) PETERSEN D M.
(FOUR/) FOURON Y.
XX
PI Bratzler RL, Petersen DM, Fouron Y;
XX
WPI; 2003-657977/62.
XX
Treating and/or preventing allergy or asthma using an immunostimulatory
nucleic acid alone or in combination with an asthma/allergy medicament.
XX
PS Disclosure; Page 6; 221pp; English.
XX
The invention relates to a method of treating or preventing allergy or
asthma which comprises administering to a subject a poly-G nucleic acid
in an aerosol formulation. The methods and compositions of the present
invention are useful for diagnosing and/or treating asthma and allergy
especially in a hypo-responsive subject. The present sequence represents
an immunostimulatory nucleic acid of the invention.
XX
SQ Sequence 18 BP; 3 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 1 ATGGCGCACGCTGGGAGA 18
||||| ||||| ||||| ||||| |||||
Db 18 ATGGCGCTCGCTGGGAGA 1
||||| ||||| ||||| ||||| |||||

RESULT 219
ADB36456/c
ID ADC70043 standard; DNA; 18 BP.
XX
AC ADC70043;
XX
DT 18-DEC-2003 (first entry)
XX
DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 532).
XX
PCRs; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
cytosine methylation state.
XX
OS Unidentified.
XX
FN WO2003052135-A2.
XX
PD 26-JUN-2003.
XX
PF 10-DEC-2002; 2002WO-EP014026.
XX
PR 14-DEC-2001; 2001DE-01061625.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
Nimmrich I;
XX
WPI; 2003-533029/50.
XX
Detecting and differentiating cytosine methylation state of genomic DNA,
PT useful for diagnosing, treating prognosticating and/or monitoring lung
PT cell proliferative disorders e.g. adenocarcinoma and squamous cell

```

PT carcinoma.

PS Claim 15; SEQ ID NO 532; 58pp; English.

XX

CC This invention relates to a novel method for detecting and

CC differentiating between lung cell proliferative disorders associated with

CC at least one gene and/or their regulatory regions. Specifically, it

CC refers to a method comprising contacting a target nucleic acid in a

CC biological sample with at least one reagent, wherein the reagent is able

CC to distinguish between methylated and non-methylated CpG dinucleotides

CC present in the target DNA. As such, it is possible to further

CC differentiate and diagnose medical conditions including adenocarcinoma

CC and squamous cell carcinoma, and their respective adjacent lung tissue.

CC The present invention describes cytosolic oligomers and PNA-oligomers

CC that are useful as probes for determining the cytosine methylation state

CC or single nucleotide polymorphisms (SNPs) of the target sequence. This

CC oligonucleotide sequence is a primer oligomer used for the analysis of

CC CpG positions within genomic DNA, used in an exemplification of the

CC invention.

XX

CC Sequence 18 BP; 4 A; 1 C; 9 G; 4 T; 0 U; 0 Other;

XX

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 1.1e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX

QY 76 AGGGGCTACGAGTGGGAT 93

DB 1 AGGGGTTACGAGTGGGAT 18

RESULT 220

AAD60227/c

ID AAD60227 standard; DNA; 18 BP.

XX

AC AAD60227;

XX

DT 18-DEC-2003 (first entry)

XX

DE Oligonucleotide 1836 used for activating dendritic cells.

XX

KW Dendritic cell activation; cancer immunotherapy; infectious diseases;

KW allergy; cell therapy; ss.

XX

OS Unidentified.

XX

PN US2003100527-A1.

XX

PD 29-MAY-2003.

XX

PF 03-JUN-2002; 2002US-00161229.

XX

PR 15-JUL-1994; 94US-00276358.

PR 07-FEB-1995; 95US-00386063.

PR 30-OCT-1996; 96US-00738652.

PR 30-OCT-1997; 97US-00960774.

PR 13-NOV-1998; 98US-00191170.

XX

PA (IOWA) UNIV IOWA RES FOUND.

XX

PI Krieg AM, Hartmann G;

XX

DR WPI; 2003-708674/67.

XX

PT Activating a dendritic cell useful for treating cancer, infectious

PT diseases or allergies, comprises contacting the dendritic cell with an

PT amount of an isolated nucleic acid that contains at least one

PT unmethylated CpG dinucleotide.

XX

PS Example 6; Page 18; 51pp; English.

XX

CC The invention relates to a method of activating a dendritic cell. The

CC method involves contacting the dendritic cell with an isolated nucleic

CC acid containing at least one unmethylated CpG dinucleotide, where the

CC nucleic acid is about 8-80 bases in length, in an amount that activates

CC the dendritic cell. The compositions and methods of the invention are

CC useful for cancer immunotherapy, or for treating an infectious disease

CC (e.g. viral, bacterial or fungal infections) or allergy. The invention is

CC useful in cell therapy. The present sequence is an oligonucleotide used

CC for activating dendritic cells

XX

XX Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

XX

Query Match 2.7%; Score 16.4; DB 1; Length 18;

Best Local Similarity 94.4%; Pred. No. 1.1e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX

QY 1 ATGGCGCACGCTGGGAGA 18

DB 18 ATGGCGCGCGCTGGGAGA 1

RESULT 221

ADE84393

ID ADE84393 standard; DNA; 18 BP.

XX

AC ADE84393;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human lymphoid cell proliferative disorder gene CpG analysis oligo #99.

XX

KW lymphoid cell proliferative disorder; methylation;

KW methylated CpG dinucleotide; single nucleotide polymorphism; SNP;

KW diffuse large B-cell lymphoma; mantle cell lymphoma;

KW chronic lymphocytic leukemia; small lymphocytic lymphoma;

KW follicular lymphoma; diagnosis; prognosis; primer; ss.

XX

OS Homo sapiens.

XX

PN WO2003044226-A2.

XX

PD 30-MAY-2003.

XX

PF 25-NOV-2002; 2002WO-EP013265.

XX

PR 23-NOV-2001; 2001DE-01057491.

PR 28-DEC-2001; 2001DE-01064501.

XX

PA (EPIC-) EPIGENOMICS AG.

XX

PI Burger M, Caldwell C, Genc B, Becker B, Maier S, Nimrich I;

XX

DR WPI; 2003-457621/43.

XX

PT Detecting and differentiating between lymphoid cell proliferative

PT disorders comprises contacting a target nucleic acid with at least one

PT reagent that distinguishes between methylated and non-methylated CpG

PT dinucleotides.

XX

PS Claim 30; SEQ ID NO 389; 448pp; English.

XX

CC The invention relates to a method of detecting and differentiating

CC between lymphoid cell proliferative disorders associated with at least

CC one gene and/or their regulatory regions in a subject by contacting a

CC target nucleic acid in a biological sample obtained from the subject with

CC at least one reagent or series of reagents that distinguish between

CC methylated and non-methylated CpG dinucleotides within the target nucleic

CC acid. The genes and/or their regulatory regions are preferably selected

CC from MDR1, CSNK2B, EGR4, AR, CDK4, RB2, CDC25A, GP1b beta, MYOD1, CDH3,

CC MYCL1, ELK1, ABL1, APC, BCL2, CDH1, CDKN1A, CDKN1B, CDKN2a, CDKN2B, FOS,

CC GSTP1, HIC-1, NGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TP73, CDKN1C,

CC GSK3beta, ESR1, AFAF1, BAK1, BAX or HOXA5. Oligomers, peptide nucleic

CC acid (PNA)-oligomers and/or isolated nucleic acids based on the sequences

CC of the genes are useful for detecting the methylation state of all the

CC CpG dinucleotides within one or more the sequences, or their complements,

CC for determining the cytosine methylation state and or single nucleotide
 CC polymorphisms (SNPs), and for differentiating at least two of the medical
 CC conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma,
 CC chronic lymphocytic leukemia, small lymphocytic lymphoma and follicular
 CC lymphoma. They are also useful for detecting of a predisposition to,
 CC differentiation between subclasses, diagnosis, prognosis, treating and/or
 CC monitoring of lymphoid cell proliferative disorder. This sequence
 CC represents an oligonucleotide used to analyse of CpG positions within the
 CC above mentioned genes.

SQ Sequence 18 BP; 4 A; 1 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 2.7%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 1.1e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 76 AGGGGCTACGAGTGGGAT 93
 Db 1 AGGGGCTACGAGTGGGAT 18

RESULT 222

AAQ51953
 ID AAQ51953 standard; RNA; 16 BP.

AC AAQ51953;

XX 25-MAR-2003 (revised)

DT 26-MAY-1994 (first entry)

XX BCL-2 mRNA ribozyme cleavable nucleotide (1719).

XX Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
 KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
 KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
 KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
 KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
 KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
 KW neuroblastoma; lung cancer; Genetic drift; mutation; hammerhead motif;
 KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.

XX Homo sapiens.

XX WO9323057-A1.

XX 25-NOV-1993.

XX 13-MAY-1993; 93WO-US004573.

XX 14-MAY-1992; 92US-00882822.

PR 14-MAY-1992; 92US-00882885.

PR 26-AUG-1992; 92US-00936110.

PR 26-AUG-1992; 92US-00936421.

PR 26-AUG-1992; 92US-00936422.

PR 26-AUG-1992; 92US-00936531.

PR 26-AUG-1992; 92US-00936532.

PR 07-DEC-1992; 92US-00987131.

PR 19-JAN-1993; 93US-00006122.

PR 19-JAN-1993; 93US-00008910.

XX (RIBO-). RIBOZYME PHARM INC.

XX Thompson JD, Draper KG;

XX WPI; 1993-386203/48.

XX New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
 PT with tumours or mRNA expressed from gene encoding multiple drug
 PT resistance.
 XX Claim 3; Fig 6; 69pp; English.
 XX The sequences given in AAQ51825-2266 represent areas of mRNAs which are

CC associated with development or maintenance of chronic myelogenous
 CC leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
 CC lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
 CC leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
 CC The full length mRNAs containing these target sequences, encode aberrant
 CC cellular proteins which are able to control cellular proliferation and
 CC are directly linked to a leukemic phenotype. These target sequences are
 CC identified by the ribozyme of the invention. The ribozymes is formed in a
 CC hammerhead motif, but may also be formed in the motif of a hairpin,
 CC hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
 CC may be used to inhibit the development or expression of a transformed
 CC phenotype in man and other animals by modulating expression of the
 CC corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
 CC and transformed cells elicits inhibition of the transformed state.
 CC Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
 CC mechanism of drug resistance used by transformed cells and thus enhances
 CC drug therapies for tumours. The ribozymes may also be used to study
 CC genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
 CC correct PN field.)

XX Sequence 16 BP; 1 A; 7 C; 5 G; 0 T; 3 U; 0 Other;

Query Match 2.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 81.2%; Pred. No. 1.1e+02;
 Matches 13; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 261 CCGGTCGCCACCTGTG 276

Db 1 CCGGTCGCCACCTGTG 16

RESULT 223

ABK90361/c
 ID ABK90361 standard; DNA; 16 BP.

XX AC ABK90361;

XX 21-OCT-2002 (first entry)

DE Bcl-2-targeting antisense oligonucleotide #30.

XX Antisense; ss; probe; Bcl-2; cell proliferative disorder; cancer; CRE;
 KW cAMP response element; bacterial infection; viral infection;
 KW inflammation; anaphylaxis; allergy; arthritis; asthma; cytostatic;
 KW autoimmune disorder; parasitic infection; virucide; hyperplasia;
 KW tumorigenesis; hepatitis B infection; human.

XX Homo sapiens.

XX WO200257480-A2.

XX 25-JUL-2002.

XX 22-JAN-2002; 2002WO-US001967.

XX 22-JAN-2001; 2001US-0263244P.

XX (GENT-) GENTA INC.

XX Klem RE;

XX WPI; 2002-590754/63.

XX Hybrid oligomer comprises a cyclic AMP response element sequence and a
 PT sequence that hybridizes to the bcl-2 pre-mRNA or mRNA useful for
 PT preventing or treating cell-proliferative disorders e.g., cancer.
 XX Disclosure; Page 13; 78pp; English.

XX The invention relates to a hybrid oligomer comprising a cyclic AMP
 CC response element (CRE) sequence and a sequence that hybridises to the bcl
 CC -2 pre-mRNA or mRNA. Also included are: (1) inhibiting the growth of
 CC cancer cells in vitro, which comprises contacting the cancer cells with a

CC hybrid oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer;
 CC (2) treating or preventing cancer in a human, which comprises
 CC administering a hybrid oligomer or a bcl-2 antisense oligomer and a CRE
 CC decoy oligomer; and (3) a pharmaceutical composition comprising a hybrid
 CC oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer and a
 CC carrier. The pharmaceutical composition of the invention is useful for
 CC preventing or treating cell-proliferative disorders e.g., cancer,
 CC hyperplasia or tumorigenesis and also bacterial infection, viral
 CC infection, inflammation, anaphylaxis, allergy, arthritis, asthma,
 CC autoimmune disorders and parasitic infection. The CRE decoy oligomer and
 CC bcl-2 antisense oligomer are also useful for preventing or treating
 CC hepatitis B virus infection. The hybrid oligomers can also be used for
 CC screening candidate transcription factors or other molecules e.g., gene
 CC regulatory proteins or for diagnostic assays. The present sequence is a
 CC Bcl-2 antisense oligonucleotide

SQ Sequence 16 BP; 1 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGCAGCGCTGGGAGA 18
 DB 16 GCGCAGCGCTGGGAGA 1

RESULT 224
 AAC65070/c
 ID AAC65070 standard; DNA; 17 BP.
 AC AAC65070;
 DT 12-FEB-2001 (first entry)
 DE Human bcl genes antisense sequence #14.
 KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
 KW protein kinase C; PKC; PCR primer; ss.
 OS Homo sapiens.
 PN WO200061810-A1.
 PD 19-OCT-2000.
 PF 07-APR-2000; 2000WO-US009293.
 PR 08-APR-1999; 99US-0128377P.
 PA (OASI-) OASIS BIOSCIENCES INC.
 PI Brown BD, Riley TA;
 DR WPI; 2000-679502/66.
 XX Antisense oligonucleotides containing degenerate and/or universal bases,
 XX and modified backbone linkages is useful to target therapeutic genes,
 XX preferably anti-apoptosis or chemoresistance genes.
 PS Example 7; Fig 3; 32pp; English.
 CC The present invention is concerned with antisense oligonucleotides
 CC containing a number of degenerate bases and with a modified backbone
 CC which can be used to direct cleavage of target RNA molecules. The use of
 CC degenerate bases reduces the risk of immune activation following
 CC injection into animals, which causes deleterious side effects associated
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C65077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention

SQ Sequence 17 BP; 2 A; 2 C; 9 G; 3 T; 0 U; 1 Other;

Query Match 2.5%; Score 15.6; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.2e+02;
 Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 278 TCCACCTGCGCGCTCG 293
 DB 16 TCCACCTGCGCGCTCG 1

RESULT 226
 AAX74686/c
 ID AAX74686 standard; RNA; 17 BP.
 AC AAX74686;
 DT 28-JUL-1999 (first entry)
 DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #214.

Query Match 2.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 170 CCCATCCAGCGCATCC 186
 DB 17 CCCATCCAGCGCATCC 1

RESULT 225
 AAC65074/c
 ID AAC65074 standard; DNA; 16 BP.
 AC AAC65074;
 DT 12-FEB-2001 (first entry)
 DE Human bcl genes antisense sequence #18.
 KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
 KW protein kinase C; PKC; PCR primer; ss.
 OS Homo sapiens.
 PN WO200061810-A1.
 PD 19-OCT-2000.
 PF 07-APR-2000; 2000WO-US009293.
 PR 08-APR-1999; 99US-0128377P.
 PA (OASI-) OASIS BIOSCIENCES INC.
 PI Brown BD, Riley TA;
 DR WPI; 2000-679502/66.
 XX Antisense oligonucleotides containing degenerate and/or universal bases,
 XX and modified backbone linkages is useful to target therapeutic genes,
 XX preferably anti-apoptosis or chemoresistance genes.
 PS Example 7; Fig 3; 32pp; English.
 CC The present invention is concerned with antisense oligonucleotides.
 CC containing a number of degenerate bases and with a modified backbone
 CC which can be used to direct cleavage of target RNA molecules. The use of
 CC degenerate bases reduces the risk of immune activation following
 CC injection into animals, which causes deleterious side effects associated
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C65077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention

SQ Sequence 16 BP; 3 A; 2 C; 9 G; 1 T; 0 U; 1 Other;

Query Match 2.5%; Score 15.6; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.2e+02;
 Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 278 TCCACCTGCGCGCTCG 293
 DB 16 TCCACCTGCGCGCTCG 1

RESULT 226
 AAX74686/c
 ID AAX74686 standard; RNA; 17 BP.
 AC AAX74686;
 DT 28-JUL-1999 (first entry)
 DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #214.

```

XX KW Vascular endothelial growth factor receptor; VEGF receptor; flk-1; flk-1;
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; cleavage;
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX foetal liver kinase 1; ss.
XX OS
XX Mus sp.
XX PN WO9715662-A2.
XX PD
XX XX
XX 01-MAY-1997.
XX PF 25-OCT-1996; 96WO-US017480.
XX PR 26-OCT-1995; 95US-0005974P.
XX PR 11-JAN-1996; 96US-00584040.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR) CHIRON CORP.
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX XX
XX WPI; 1997-259017/23.
XX XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX rheumatoid arthritis, etc., in a human patient.
XX XX
XX Claim 4; Page 161; 218pp; English.
XX XX
XX The present invention describes nucleic acid molecules which modulate the
XX synthesis, expression and/or stability of a mRNA encoding 1 or more
XX receptors of vascular endothelial growth factor (VEGF). A patient
XX (preferably human) having a condition associated with the level of the
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX treated by administering the nucleic acid molecule or the expression
XX vector to the patient. AAX67275 to AAX75752 represent specific examples
XX of nucleic acid molecules from the present invention
XX SQ
XX Sequence 17 BP; 2 A; 6 C; 2 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 2.5%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 1.3e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 563 GGATCCAGGATAACGGA 579
XX |||||
XX DB 17 GGATCCAGGATAACGGA 1
XX
XX RESULT 227
XX ABZ65351/C
XX ID ABZ65351 standard; RNA; 17 BP.
XX XX
XX AC ABZ65351;
XX XX
XX 21-MAR-2003 (first entry)
XX XX
XX Human HER2 DNazyme substrate #808.
XX DE
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX WO200297114-A2.
XX PN
XX 05-DEC-2002.
XX PD
XX 29-MAY-2002; 2002WO-US016840.
XX PF
XX 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX Mcswiggen J;
XX PI
XX WPI; 2003-140484/13.
XX XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX XX
XX Claim 4; Page 148; 185pp; English.
XX XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX XX
XX SQ
XX Sequence 17 BP; 5 A; 10 C; 1 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 2.5%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 1.3e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 462 TGGGGTCATGTCGTGG 478
XX |||||
XX DB 17 TGGGGTCATGTCGTGGG 1
XX
XX RESULT 228
XX ABZ65350/C
XX ID ABZ65350 standard; RNA; 17 BP.
XX XX
XX AC ABZ65350;
XX XX
XX 21-MAR-2003 (first entry)
XX XX
XX Human HER2 DNazyme substrate #807.
XX DE
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX WO200297114-A2.
XX PN
XX 05-DEC-2002.
XX PD
XX 29-MAY-2002; 2002WO-US016840.
XX PF
XX 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX Mcswiggen J;
XX PI
XX WPI; 2003-140484/13.
XX XX

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XX Novel short interfering RNA and enzymatic nucleic acid useful for
 PT treating cancer, modulates the expression of a nucleic acid encoding
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
 XX
 XX Claim 4; Page 148; 185pp; English.
 XX The invention relates to a novel short interfering RNA (siRNA) nucleic
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
 CC rheumatic activity. The nucleic acid molecules are useful for reducing
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
 CC ribozymes of the invention
 XX
 SQ Sequence 17 BP; 4 A; 10 C; 1 G; 0 T; 2 U; 0 Other;
 Query Match 2.5%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 464 GGGTCATGTGTGGAG 480
 DB 17 GGGTCATGTGTGGAG 1
 RESULT 229
 ACD5630/C
 ID ACD5630 standard; RNA; 17 BP.
 XX
 AC ACD5630;
 DT 30-SEP-2003 (first entry)
 XX HCV minus strand DNzyme substrate sequence #2149.
 DE
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberyze; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis C virus.
 XX
 XX WO200281494-A1.
 XX 17-OCT-2002.
 XX 26-MAR-2002; 2002WO-US009187.
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 XX Claim 1; Page 313; 387pp; English.
 XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
 CC inozymes, zinzymes, amberyzes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNzyme or minus strand DNzyme sequences disclosed in the present
 CC invention
 XX
 SQ Sequence 17 BP; 2 A; 7 C; 7 G; 0 T; 1 U; 0 Other;
 Query Match 2.5%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.3e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 248 GGCCTGCGCTCAGCCG 264
 DB 17 GGCCTGCGCTCAGCCG 1
 RESULT 230
 ACD57039
 ID ACD57039 standard; RNA; 17 BP.
 XX
 AC ACD57039;
 XX
 DT 23-SEP-2003 (first entry)
 XX HCV DNzyme substrate sequence #129.
 DE
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberyze; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis C virus.
 XX
 XX WO200281494-A1.
 XX 17-OCT-2002.
 XX 26-MAR-2002; 2002WO-US009187.
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.

XX PI Brown BD, Riley TA;
 XX WPI; 2000-679502/66.
 XX Antisense oligonucleotides containing degenerate and/or universal bases,
 PT and modified backbone linkages is useful to target therapeutic genes,
 PT preferably anti-apoptosis or chemoresistance genes.
 XX Example 7; Fig 3; 32pp; English.
 XX The present invention is concerned with antisense oligonucleotides
 CC containing a number of degenerate bases and with a modified backbone
 CC which can be used to direct cleavage of target RNA molecules. The use of
 CC degenerate bases reduces the risk of immune activation following
 CC injection into animals, which causes deleterious side effects associated
 CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
 CC C65077 are antisense oligonucleotides and PCR primers used in assays to
 CC demonstrate the effects of the sequences of the invention
 XX Sequence 16 BP; 1 A; 5 C; 7 G; 2 T; 0 U; 1 Other;
 SQ Query Match 2.4%; Score 15; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.3e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 181 GCATCCCGCGACCGG 196
 DB |||||
 16 GCATCCCGGACCGG 1
 RESULT 233
 AAD15637/c
 ID AAD15637 standard; DNA; 20 BP.
 XX AAD15637;
 XX 15-NOV-2001 (first entry)
 XX Human Bcl-2 protein target DNA #11.
 DE Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
 KW Homo sapiens.
 OS WO200161030-A2.
 PN 23-AUG-2001.
 PD 14-FEB-2001; 2001WO-US004732.
 PF 14-FEB-2000; 2000US-00504653.
 PR (BOLL/) BOLLON A P.
 PA (GRAY/) GRAY D M.
 PA (JUSE/) JU-SEOG L.
 XX Bollon AP, Gray DM, Ju-Seog L;
 XX WPI; 2001-529916/58.
 XX Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.
 XX Example 9; Page 28; 87pp; English.
 XX The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC The antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is

CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA
 XX Sequence 20 BP; 2 A; 5 C; 11 G; 2 T; 0 U; 0 Other;
 SQ Query Match 2.3%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 2e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 300 CGCGCAGCATTCTCCCGC 318
 DB |||||
 19 CGCGCCCAATCTCCCGC 1
 RESULT 234
 AAA95741
 ID AAA95741 standard; DNA; 14 BP.
 XX AAA95741;
 XX 14-FEB-2001 (first entry)
 DE PKCalpha primer-pair amplification primer FUP112.
 XX Amplification; primer pair; anchor; reverse transcriptase;
 KW DNA polymerase; complementation; stem structure; ss.
 XX Homo sapiens.
 XX WO200061807-A1.
 PN 19-OCT-2000.
 PD 07-APR-2000; 2000WO-US009230.
 PF 08-APR-1999; 99US-0128378P.
 PR (OASI-) OASIS BIOSCIENCES INC.
 PA Brown BD;
 PI #PI; 2001-031588/04.
 XX Novel primer pairs useful for amplifying and sequencing nucleic acid
 PT sequences, comprising oligonucleotide anchors and primers.
 XX Example 1; Page 8; 21pp; English.
 CC The invention relates to amplifying a target nucleic acid sequence using
 CC a primer pair comprising an oligonucleotide anchor and primer, where the
 CC anchor is not a substrate for reverse transcriptase or DNA polymerase
 CC and/or has a 3' end which is not capable of priming nucleic acid
 CC synthesis, the primer part is a substrate for reverse transcriptase or
 CC DNA polymerase and both the anchor and the primer include a region of
 CC complementary nucleotides capable of associating to form a stem
 CC structure. The method comprises amplifying the target nucleic acid
 CC sequence with paired forward anchor (FA)-forward primer (FP), and reverse
 CC anchor (RA)-reverse primer (RP), where the FA/FP form a first primer pair
 CC and the RA/RP form a second primer pair via association of their
 CC complementary stem regions. The primers are selected on the basis of
 CC complementarity to the target nucleic acid sequence and amplification is
 CC via enzyme-mediated amplification. This sequence represents an example of
 CC a forward universal primer which is complementary to the FA-FP pair
 XX Sequence 14 BP; 1 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
 SQ Query Match 2.3%; Score 14; DB 1; Length 14;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 267 GCACCTCTGGTCC 280
 DB |||||

Db 1 GCCACCTGTGTGCC 14

RESULT 235
ABK90359/c
ID ABK90359 standard; DNA; 14 BP.
XX
AC ABK90359;
XX
DT 21-OCT-2002 (first entry)
XX
DE Bcl-2-targeting antisense oligonucleotide #28.
XX
KW Antisense; ss; probe; Bcl-2; cell proliferative disorder; cancer; CRE;
KW CAMP response element; bacterial infection; viral infection;
KW inflammation; anaphylaxis; allergy; arthritis; asthma; cytostatic;
KW autoimmune disorder; parasitic infection; viricide; hyperplasia;
KW tumorigenesis; hepatitis B infection; human.
XX
OS Homo sapiens.
XX
PN WO200257480-A2.
XX
PD 25-JUL-2002.
XX
PF 22-JAN-2002; 2002WO-US001967.
XX
PR 22-JAN-2001; 2001US-0263244P.
XX
PA (GENT-) GENTA INC.
XX
PI Klem RE;
XX
DR WPI; 2002-590754/63.
XX
KW Hybrid oligomer comprises a cyclic AMP response element sequence and a
PT sequence that hybridizes to the bcl-2 pre-mRNA or mRNA useful for
PT preventing or treating cell-proliferative disorders e.g., cancer.
XX
PS Disclosure; Page 12; 79pp; English.
XX
CC The invention relates to a hybrid oligomer comprising a cyclic AMP
CC response element (CRE) sequence and a sequence that hybridizes to the bcl
CC -2 pre-mRNA or mRNA. Also included are: (1) inhibiting the growth of
CC cancer cells in vitro, which comprises contacting the cancer cells with a
CC hybrid oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer;
CC (2) treating or preventing cancer in a human, which comprises
CC administering a hybrid oligomer or a bcl-2 antisense oligomer and a CRE
CC decoy oligomer; and (3) a pharmaceutical composition comprising a hybrid
CC oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer and a
CC carrier. The pharmaceutical composition of the invention is useful for
CC preventing or treating cell-proliferative disorders e.g., cancer.
CC hyperplasia or tumorigenesis and also bacterial infection, viral
CC infection, inflammation, anaphylaxis, allergy, arthritis, asthma,
CC autoimmune disorders and parasitic infection. The CRE decoy oligomer and
CC bcl-2 antisense oligomer are also useful for preventing or treating
CC hepatitis B virus infection. The hybrid oligomers can also be used for
CC screening candidate transcription factors or other molecules e.g., gene
CC regulatory proteins or for diagnostic assays. The present sequence is a
CC Bcl-2 antisense oligonucleotide
XX
SQ Sequence 14 BP; 1 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 5 CGCACGCTCGGAGA 18
DB 14 CGCACGCTCGGAGA 1
RESULT 236

AAC65075/c
ID AAC65075 standard; DNA; 14 BP.
XX
AC AAC65075;
XX
DT 12-FEB-2001 (first entry)
XX
DE Human bcl genes antisense sequence #19.
XX
KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
KW protein kinase C; PKC; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO2000061810-A1.
XX
PD 19-OCT-2000.
XX
PF 07-APR-2000; 2000WO-US0009293.
XX
PR 08-APR-1999; 99US-0128377P.
XX
PA (OASI-) OASIS BIOSCIENCES INC.
XX
PI Brown BD, Riley TA;
XX
DR WPI; 2000-679502/66.
XX
KW Antisense oligonucleotides containing degenerate and/or universal bases,
PT and modified backbone linkages is useful to target therapeutic genes,
PT preferably anti-apoptosis or chemoresistance genes.
XX
PS Example 7; Fig 3; 32pp; English.
XX
CC The present invention is concerned with antisense oligonucleotides
CC containing a number of degenerate bases and with a modified backbone
CC which can be used to direct cleavage of target RNA molecules. The use of
CC degenerate bases reduces the risk of immune activation following
CC injection into animals, which causes deleterious side effects associated
CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
CC CS0077 are antisense oligonucleotides and PCR primers used in assays to
CC demonstrate the effects of the sequences of the invention
XX
SQ Sequence 14 BP; 0 A; 5 C; 7 G; 1 T; 0 U; 1 Other;
Query Match 2.2%; Score 13.6; DB 1; Length 14;
Best Local Similarity 92.9%; Pred. No. 1.5e+02;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 291 CCGCCCAAGCCGCGC 304
DB 14 CCGCCCAAGCCGCGC 1
RESULT 237
AAQ51961/c
ID AAQ51961 standard; RNA; 36 BP.
XX
AC AAQ51961;
XX
DT 25-MAR-2003 (revised)
DT 26-MAY-1994 (first entry)
XX
DE BCL-2 mRNA ribozyme cleavable nucleotide (1997).
XX
KW Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.

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XX OS Homo sapiens.
XX PN WO9323057-A1.
XX PD 25-NOV-1993.
XX PF 13-MAY-1993; 93WO-US004573.
XX PR 14-MAY-1992; 92US-00882822.
XX PR 14-MAY-1992; 92US-00882885.
XX PR 26-AUG-1992; 92US-00936110.
XX PR 26-AUG-1992; 92US-00936421.
XX PR 26-AUG-1992; 92US-00936422.
XX PR 26-AUG-1992; 92US-00936531.
XX PR 26-AUG-1992; 92US-00936532.
XX PR 07-DEC-1992; 92US-00987131.
XX PR 19-JAN-1993; 93US-00006122.
XX PR 19-JAN-1993; 93US-00008910.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Thompson JD, Draper KG;
XX WI; 1993-386203/48.
XX PT New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
XX PT with tumours or mRNA expressed from gene encoding multiple drug
XX PT resistance.
XX PS Claim 3; Fig 6; 69pp; English.
XX CC The sequences given in AAQ51825-2266 represent areas of mRNAs which are
XX CC associated with development or maintenance of chronic myelogenous
XX CC leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or acute
XX CC lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
XX CC leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
XX CC The full length mRNAs containing these target sequences, encode aberrant
XX CC cellular proteins which are able to control cellular proliferation and
XX CC are directly linked to a leukemic phenotype. These target sequences are
XX CC identified by the ribozyme of the invention. The ribozymes is formed in a
XX CC hammerhead motif, but may also be formed in the motif of a hairpin,
XX CC hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
XX CC may be used to inhibit the development or expression of a transformed
XX CC phenotype in man and other animals by modulating expression of the
XX CC corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
XX CC and transformed cells elicits inhibition of the transformed state.
XX CC Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
XX CC mechanism of drug resistance used by transformed cells and thus enhances
XX CC drug therapies for tumours. The ribozymes may also be used to study
XX CC genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
XX CC correct PN field.)
XX SQ Sequence 36 BP; 10 A; 13 C; 8 G; 0 T; 5 U; 0 Other;
      Query Match 2.2%; Score 13.6; DB 1; Length 36;
      Best Local Similarity 67.9%; Pred. No. 2.5e+02;
      Matches 19; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY 560 CTTGATCCAGATTAACGAGGCTGGGT 587
      |||||
Db 33 CTTGATCCAGGTGTGCGAGGTGCGGTT 6

RESULT 238
AADI5638/c
ID AADI5638 standard; DNA; 20 BP.
XX AC AADI5638;
XX OS Homo sapiens.
XX PN 15-NOV-2001 (first entry)
XX DT
XX PD Human Bcl-2 protein target DNA #12.

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XX KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX OS Homo sapiens.
XX PN WO200161030-A2.
XX PD 23-AUG-2001.
XX PF 14-FEB-2001; 2001WO-US004732.
XX PR 14-FEB-2000; 2000US-00504653.
XX XX (BOLL/) BOLLON A P.
XX PA (GRAY/) GRAY D M.
XX PA (JUSE/) JU-SEOG L.
XX PI Bollon AP, Gray DM, Ju-Seog L;
XX WI; 2001-529916/58.
XX PT Selecting optimal subsequence antisense targets for inhibition of mRNA
XX PT expression of target mRNA for the therapeutic treatment of genetic
XX PT disease.
XX PS Example 9; Page 28; 87pp; English.
XX CC The invention relates to a method for selecting optimal subsequence
XX CC antisense targets. The method involves preparing an antisense
XX CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
XX CC sequences, as well as antisense oligonucleotides capable of binding DNA.
XX CC The antisense and antigen libraries are useful for preparing therapeutic
XX CC agents for the treatment of genetic disease. The present DNA sequence is
XX CC human Bcl-2 protein target DNA related to the invention. Note: The
XX CC present sequence is shown as DNA in the specification; however, in vivo,
XX CC this target sequence would be mRNA
XX SQ Sequence 20 BP; 2 A; 5 C; 11 G; 2 T; 0 U; 0 Other;
      Query Match 2.1%; Score 13.2; DB 1; Length 20;
      Best Local Similarity 83.3%; Pred. No. 2.4e+02;
      Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 300 CGCGCAGCGACTTCTCCCG 317
      |||||
Db 18 CGCGCCCCACATCTCCCG 1

RESULT 239
AAQ51955
ID AAQ51955 standard; RNA; 13 BP.
XX AC AAQ51955;
XX OS Homo sapiens.
XX PN 25-MAR-2003 (revised)
XX DT 26-MAY-1994 (first entry)
XX DE BCL-2 mRNA ribozyme cleavable nucleotide (1683).
XX KW Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
XX KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
XX KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
XX KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
XX KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
XX KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
XX KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
XX KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
XX OS Homo sapiens.
XX PN WO9323057-A1.
XX PD 25-NOV-1993.

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DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 168056; 29pp + Sequence Listing; German.
 CC
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 469 ATGTGTGTGGAGA 481
 DB 13 ATGTGTGTGGAGA 1
 RESULT 242
 ABK90358/c
 ID ABK90358 standard; DNA; 13 BP.
 XX
 AC ABK90358;
 XX
 DT 21-OCT-2002 (first entry)
 DE Bcl-2-targeting antisense oligonucleotide #27.
 XX
 KW Antisense; ss; probe; Bcl-2; cell proliferative disorder; cancer; CRE;
 KW CAMP response element; bacterial infection; viral infection;
 KW inflammation; anaphylaxis; allergy; arthritis; asthma; cytostatic;
 KW autoimmune disorder; parasitic infection; viricide; hyperplasia;
 KW tumorigenesis; hepatitis B infection; human.
 XX
 OS Homo sapiens.
 XX
 PN WO200257480-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 22-JAN-2002; 2002WO-US001967.
 XX
 PR 22-JAN-2001; 2001US-0263244P.
 XX
 PA (GENT-) GENTA INC.
 XX
 PI Klem RE;
 XX
 WPI; 2002-590754/63.
 XX
 PT Hybrid oligomer comprises a cyclic AMP response element sequence and a
 PT sequence that hybridizes to the bcl-2 pre-mRNA or mRNA useful for
 PT preventing or treating cell-proliferative disorders e.g., cancer.
 XX
 PS Disclosure; Page 12; 78pp; English.
 CC
 CC The invention relates to a hybrid oligomer comprising a cyclic AMP
 CC response element (CRE) sequence and a sequence that hybridizes to the bcl
 CC -2 pre-mRNA or mRNA. Also included are: (1) inhibiting the growth of

CC cancer cells in vitro, which comprises contacting the cancer cells with a
 CC hybrid oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer;
 CC (2) treating or preventing cancer in a human, which comprises
 CC administering a hybrid oligomer or a bcl-2 antisense oligomer and a CRE
 CC decoy oligomer; and (3) a pharmaceutical composition comprising a hybrid
 CC oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer and a
 CC carrier. The pharmaceutical composition of the invention is useful for
 CC preventing or treating cell-proliferative disorders e.g., cancer;
 CC hyperplasia or tumorigenesis and also bacterial infection, viral
 CC infection, inflammation, anaphylaxis, allergy, arthritis, asthma,
 CC autoimmune disorders and parasitic infection. The CRE decoy oligomer and
 CC bcl-2 antisense oligomer are also useful for preventing or treating
 CC hepatitis B virus infection. The hybrid oligomers can also be used for
 CC screening candidate transcription factors or other molecules e.g., gene
 CC regulatory proteins or for diagnostic assays. The present sequence is a
 CC Bcl-2 antisense oligonucleotide
 XX
 SQ Sequence 13 BP; 1 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 6 GCACGCTGGAGA 18
 DB 13 GCACGCTGGAGA 1
 RESULT 243
 AAD15628/c
 ID AAD15628 standard; DNA; 20 BP.
 XX
 AC AAD15628;
 XX
 DT 15-NOV-2001 (first entry)
 DE Human Bcl-2 protein target DNA #2.
 XX
 KW Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200161030-A2.
 XX
 PD 23-AUG-2001.
 XX
 PF 14-FEB-2001; 2001WO-US004732.
 XX
 PR 14-FEB-2000; 2000US-00504653.
 XX
 PA (BOLL/) BOLLON A P.
 PA (GRAY/) GRAY D M.
 PA (JUSE/) JU-SEOG L.
 XX
 PI Bollon AP, Gray DM, Ju-Seog L;
 XX
 WPI; 2001-529916/58.
 XX
 PT Selecting optimal subsequence antisense targets for inhibition of mRNA
 PT expression of target mRNA for the therapeutic treatment of genetic
 PT disease.
 XX
 PS Example 9; Page 28; 87pp; English.
 CC
 CC The invention relates to a method for selecting optimal subsequence
 CC antisense targets. The method involves preparing an antisense
 CC oligonucleotide capable of inhibiting mRNA expression of target mRNA
 CC sequences, as well as antisense oligonucleotides capable of binding DNA.
 CC the antisense and antigen libraries are useful for preparing therapeutic
 CC agents for the treatment of genetic disease. The present DNA sequence is
 CC human Bcl-2 protein target DNA related to the invention. Note: The
 CC present sequence is shown as DNA in the specification; however, in vivo,
 CC this target sequence would be mRNA

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XX SQ Sequence 20 BP; 0 A; 9 C; 10 G; 1 T; 0 U; 0 Other;
Query Match 2.0%; Score 12.6; DB 1; Length 20;
Best Local Similarity 78.9%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 233 CCGGCGCGCGCGCGCGGCGC 251
Db 19 CAGGCCCGCGCGCGCGCC 1

RESULT 244
AAD15630/c
ID AAD15630 standard; DNA; 20 BP.
AC AAD15630;
XX 15-NOV-2001 (first entry)
XX Human Bcl-2 protein target DNA #4.
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX Homo sapiens.
XX WO200161030-A2.
XX 23-AUG-2001.
XX 14-FEB-2001; 2001WO-US004732.
XX 14-FEB-2000; 2000US-00504653.
XX (BOLL/) BOLLON A P.
XX (GRAY/) GRAY D M.
XX (JUSE/) JU-SEOG L.
XX Bollon AP, Gray DM, Ju-Seog L;
XX WPI; 2001-529916/58.
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
XX expression of target mRNA for the therapeutic treatment of genetic
XX disease.
XX Example 9; Page 28; 87pp; English.
XX The invention relates to a method for selecting optimal subsequence
XX antisense targets. The method involves preparing an antisense
XX oligonucleotide capable of inhibiting mRNA expression of target mRNA
XX sequences, as well as antisense oligonucleotides capable of binding DNA.
XX The antisense and antigen libraries are useful for preparing therapeutic
XX agents for the treatment of genetic disease. The present DNA sequence is
XX human Bcl-2 protein target DNA related to the invention. Note: The
XX present sequence is shown as DNA in the specification; however, in vivo,
XX this target sequence would be mRNA
XX Sequence 20 BP; 0 A; 9 C; 10 G; 1 T; 0 U; 0 Other;
Query Match 2.0%; Score 12.6; DB 1; Length 20;
Best Local Similarity 78.9%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 233 CCGGCGCGCGCGCGCGGCGC 251
Db 20 CAGGCCCGCGCGCGCGCC 2

RESULT 245
AAD15627/c
ID AAD15632 standard; DNA; 20 BP.
AC AAD15632;
XX 15-NOV-2001 (first entry)
XX Human Bcl-2 protein target DNA #6.
XX Human; Bcl-2 protein; genetic disease; antisense target; therapeutic; ss.
XX Homo sapiens.
XX WO200161030-A2.
XX 23-AUG-2001.
XX 14-FEB-2001; 2001WO-US004732.
XX
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CC associated with development or maintenance of chronic myelogenous
 CC leukemia (CMU), promyelocytic leukemia, Burkitt's lymphoma, or acute
 CC lymphocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
 CC leukemia, breast cancer, colon carcinoma, neuroblastoma and lung cancer.
 CC The full length mRNAs containing these target sequences, encode aberrant
 CC cellular proteins which are able to control cellular proliferation and
 CC are directly linked to a leukemic phenotype. These target sequences are
 CC identified by the ribozyme of the invention. The ribozymes is formed in a
 CC hammerhead motif, but may also be formed in the motif of a hairpin,
 CC hepatitis delta virus, group I intron or RNaseP-like RNA. These ribozymes
 CC may be used to inhibit the development or expression of a transformed
 CC phenotype in man and other animals by modulating expression of the
 CC corresponding gene. Cleavage of target mRNAs expressed in pre-neoplastic
 CC and transformed cells elicits inhibition of the transformed state.
 CC Multiple drug resistance (mdr-1) mRNA specific ribozymes remove the
 CC mechanism of drug resistance used by transformed cells and thus enhances
 CC drug therapies for tumours. The ribozymes may also be used to study
 CC genetic drift and mutations within cells. (Updated on 25-MAR-2003 to
 CC correct PN field.)
 XX
 SQ Sequence 12 BP; 5 A; 2 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 2.0%; Score 12; DB 1; Length 12;
 Best Local Similarity 75.0%; Pred. No. 1.8e+02;
 Matches 9; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 46 ATGAAGTACATC 57
 :||||:|
 DB 1 AUGAAGUACAUC 12

RESULT 249
 AAQ94564/c
 ID AAQ94564 standard; RNA; 12 BP.
 AC AAQ94564;
 XX
 XX 23-JAN-1996 (first entry)
 DT
 XX
 DE RNA "clamp" used to block contaminants in a nucleic acid mixture.
 XX
 XX Decontamination; block; probe; analysis; separation; isolation; ss.
 XX
 XX Synthetic.
 OS
 PN WO9514790-A1.
 XX
 XX 01-JUN-1995.
 PD
 XX 21-NOV-1994; 94WO-IB000366.
 PF
 XX 23-NOV-1993; 93US-00157364.
 PR
 XX (CIBA) CIBA CORNING DIAGNOSTICS CORP.
 PA
 XX Ludtke DN, Monahan JE, Unger JT;
 PI
 XX WPI; 1995-206946/27.
 DR
 XX
 XX Decontamination of a mixt. of desired and contaminating nucleic acids -
 PT by blocking the activity of the contaminating nucleic acids using
 PT antisense nucleic acids.
 XX
 XX Example 3; Page 35; 50pp; English.
 PS
 XX AAQ94564-Q9467 are negative RNA clamps used in a new method to block the
 CC activity of contaminating nucleic acids in a nucleic acid mixture to
 CC allow the efficient amplification of a specific nucleic acid present in
 CC the mixture. The method is useful in eliminating contaminating nucleic
 CC acids from an amplification area making amplification more efficient and
 CC gene probe analysis more reproducible
 XX
 XX Sequence 12 BP; 1 A; 4 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 2.0%; Score 12; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.8e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 567 CCAGGATAACGG 578
 |||||
 DB 12 CCAGGATAACGG 1

RESULT 250
 AAF91774/c
 ID AAF91774 standard; DNA; 12 BP.
 XX
 XX AAF91774;
 AC
 XX 10-MAY-2001 (first entry)
 DT
 XX Breast-cancer associated protein isoform BPI-43 preferred probe #8.
 DE
 XX Human; breast cancer; breast cancer associated protein isoform; BPI;
 KW breast cancer associated feature; BF; diagnosis; cytostatic; probe; ss.
 XX
 XX Homo sapiens.
 OS
 PN WO200113117-A2.
 XX
 XX 22-FEB-2001.
 PD
 XX 14-AUG-2000; 2000WO-GB003143.
 PF
 XX 13-AUG-1999; 99GB-00019258.
 PR
 XX 30-MAR-2000; 2000GB-00007754.
 PR
 XX (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
 PA
 XX Herath HMAC;
 PI
 XX WPI; 2001-211252/21.
 DR
 XX

Screening, diagnosis or prognosis of breast cancer, by analyzing a sample
 of serum or plasma by two dimensional electrophoresis to detect the
 presence or level of a breast cancer-associated feature.
 Claim 185; Page 44; 146pp; English.
 The present invention describes a method for the screening, diagnosis or
 prognosis of breast cancer (BC), determining the stage or severity of BC,
 and monitoring the effect of therapy administered to a subject having BC,
 comprising analysing a sample of body fluid by two dimensional
 electrophoresis to generate a two-dimensional array of features,
 comprising a chosen feature whose abundance correlates with BC or
 predicts the onset or course of BC. The method (i) involves: (a)
 analysing a sample of body fluid from the subject by two-dimensional
 electrophoresis to generate a two-dimensional array of features,
 comprising a chosen feature whose relative abundance correlates with BC
 or predicts the onset of BC; and (b) comparing the abundance of each
 chosen feature in the sample with the abundance of that chosen feature in
 the body fluid from one or more persons free from BC, or with a
 previously determined reference range for that feature in subjects free
 from BC, or with the abundance of an expression reference feature (ERF)
 in the test sample. The method is useful for screening, diagnosis or
 prognosis of breast cancer, determining the stage or severity of BC,
 monitoring the effect of therapy administered to a subject having BC, and
 for identifying a subject at risk of developing BC. AAB87186 to AAB87340
 represents breast cancer associated protein isoform (BPI) peptide
 sequences, and AAF91643 to AAF91848 represent BPI probes used in the
 exemplification of the present invention

Query Match 2.0%; Score 12; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.8e+02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 558 CACCTGGATCCA 569
 DB 12 CACCTGGATCCA 1

RESULT 251
 AAF91702
 ID AAF91702 standard; DNA; 12 BP.
 XX
 AC
 XX
 XX
 XX
 DT 10-MAY-2001 (first entry)
 XX
 DE Breast-cancer associated protein isoform BPI-44 preferred probe #2.
 XX
 DE Human; breast cancer; breast cancer associated protein isoform; BPI;
 KW breast cancer associated feature; BF; diagnosis; cytostatic; probe; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200113117-A2.
 XX
 PD 22-FEB-2001.
 XX
 XX 14-AUG-2000; 2000WO-GB003143.
 PF
 XX 13-AUG-1999; 99GB-00019258.
 PR
 XX 30-MAR-2000; 2000GB-00007754.
 XX
 XX (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
 PA
 XX
 XX Herath HMCAC;
 PI
 XX WPI; 2001-211252/21.
 DR
 XX
 PT Screening, diagnosis or prognosis of breast cancer, by analyzing a sample
 PT of serum or plasma by two dimensional electrophoresis to detect the
 PT presence or level of a breast cancer-associated feature.
 XX
 PS Claim 176; Page 42; 146pp; English.
 CC
 CC The present invention describes a method for the screening, diagnosis or
 CC prognosis of breast cancer (BC), determining the stage or severity of BC,
 CC and monitoring the effect of therapy administered to a subject having BC,
 CC comprising analysing a sample of body fluid by two dimensional
 CC electrophoresis to generate a two-dimensional array of features,
 CC comprising a chosen feature whose abundance correlates with BC or
 CC predicts the onset or course of BC. The method (I) involves: (a)
 CC analysing a sample of body fluid from the subject by two-dimensional
 CC electrophoresis to generate a two-dimensional array of features,
 CC comprising a chosen feature whose relative abundance correlates with BC
 CC or predicts the onset of BC; and (b) comparing the abundance of each
 CC chosen feature in the sample with the abundance of that chosen feature in
 CC the body fluid from one or more persons free from BC, or with a
 CC previously determined reference range for that feature in subjects free
 CC from BC, or with the abundance of an expression reference feature (ERF)
 CC in the test sample. The method is useful for screening, diagnosis or
 CC prognosis of breast cancer, determining the stage or severity of BC,
 CC monitoring the effect of therapy administered to a subject having BC, and
 CC for identifying a subject at risk of developing BC. AAB87186 to AAB87340
 CC represents breast cancer associated protein isoform (BPI) peptide
 CC sequences, and AAF91643 to AAF91848 represent BPI probes used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 12 BP; 2 A; 0 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 2.0%; Score 12; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred.No. 1.8e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 397 GTGGTGGAGGAG 408

Db 1 GTGGTGGAGGAG 12

RESULT 252
 ABI00109/c
 ID ABI00109 standard; DNA; 12 BP.
 XX
 AC
 XX
 XX
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 300082 for detecting SNP TSC0018852.
 XX
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPITG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 300082; 29pp + Sequence Listing; German.
 CC
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 2 A; 7 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 2.0%; Score 12; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred.No. 1.8e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 86 AGTGGGATCGCG 97
 DB 12 AGTGGGATCGCG 1

RESULT 253
 ABI75178/c
 ID ABI75178 standard; DNA; 12 BP.
 XX
 AC ABI75178;
 XX
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 375151 for detecting SNP TSC0005538.

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XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 375151; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 2 A; 8 C; 0 G; 2 T; 0 U; 0 Other;
SQ Query Match 2.0%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 397 GTGGTGGAGGAG 408
Db |||||
12 GTGGTGGAGGAG 1
RESULT 254
ABH84990/C
ID ABH84990 standard; DNA; 12 BP.
XX AC ABH84990;
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 284993 for detecting SNP TSC0012088.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.

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PR 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 284983; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 4 A; 0 C; 3 G; 5 T; 0 U; 0 Other;
SQ Query Match 2.0%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 53 ACATCCATTATA 64
Db |||||
12 ACATCCATTATA 1
RESULT 255
ABK90357/C
ID ABK90357 standard; DNA; 12 BP.
XX AC ABK90357;
XX 21-OCT-2002 (first entry)
XX DE Bcl-2-targeting antisense oligonucleotide #26.
XX Antisense; ss; probe; Bcl-2; cell proliferative disorder; cancer; CRE;
KW cAMP response element; bacterial infection; viral infection;
KW inflammation; anaphylaxis; allergy; arthritis; asthma; cytostatic;
KW autoimmune disorder; parasitic infection; virucide; hyperplasia;
KW tumourigenesis; hepatitis B infection; human.
XX Homo sapiens.
XX WO200257480-A2.
XX 25-JUL-2002.
XX 22-JAN-2002; 2002WO-US001967.
XX 22-JAN-2001; 2001US-0263244P.
XX (GENT-) GENTA INC.
XX Klem RE;
XX WPI; 2002-590754/63.
XX Hybrid oligomer comprises a cyclic AMP response element sequence and a
PT sequence that hybridizes to the bcl-2 pre-mRNA or mRNA useful for
PT preventing or treating cell-proliferative disorders e.g., cancer.

```

XX PS Disclosure; Page 12; 79pp; English.

XX CC The invention relates to a hybrid oligomer comprising a cyclic AMP

CC response element (CRE) sequence and a sequence that hybridizes to the bcl

CC -2 pre-mRNA or mRNA. Also included are: (1) inhibiting the growth of

CC cancer cells in vitro, which comprises contacting the cancer cells with a

CC hybrid oligomer or a bcl-2 antisense oligomer; and a CRE decoy oligomer;

CC (2) treating or preventing cancer in a human, which comprises

CC administering a hybrid oligomer or a bcl-2 antisense oligomer and a CRE

CC decoy oligomer; and (3) a pharmaceutical composition comprising a hybrid

CC oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer and a

CC carrier. The pharmaceutical composition of the invention is useful for

CC preventing or treating cell-proliferative disorders e.g., cancer,

CC hyperplasia or tumorigenesis and also bacterial infection, viral

CC infection, inflammation, anaphylaxis, allergy, arthritis, asthma,

CC autoimmune disorders and parasitic infection. The CRE decoy oligomer and

CC bcl-2 antisense oligomer are also useful for preventing or treating

CC hepatitis B virus infection. The hybrid oligomers can also be used for

CC screening candidate transcription factors or other molecules e.g., gene

CC regulatory proteins or for diagnostic assays. The present sequence is a

CC Bcl-2 antisense oligonucleotide

XX SQ Sequence 12 BP; 1 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 2.0%; Score 12; DB 1; Length 12;

Best Local Similarity 100.0%; Pred. No. 1.8e+02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 CACGCTGGGAGA 18

DB 12 CACGCTGGGAGA 1

RESULT 256 ;

ABX79801/C

ID ABX79801 standard; cDNA; 12 BP.

XX AC ABX79801;

XX DT 17-APR-2003 (first entry)

XX DE EST polymorphic DNA repeat polynucleotide #126.

XX KW EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;

XX KW polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;

XX KW Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;

XX KW Haw River syndrome; Huntington's disease; fragile-X syndrome;

XX KW Friedreich's ataxia; myotonic dystrophy; hyperandrogenaemia;

XX KW spinal atrophy; bulbar atrophy; spinocerebellar ataxia.

XX OS Homo sapiens.

XX PN US6472154-B1.

XX PD 29-OCT-2002.

XX PF 31-DEC-1999; 99US-00475947.

XX PR 31-DEC-1999; 99US-00475947.

XX PA (TEXA) UNIV TEXAS SYSTEM.

XX PI Garner HR, Wren JD, Minna JD, Fondon JW;

XX DR WPI; 2003-208818/20.

XX PT Identifying a candidate polymorphic repeat within a coding sequence, for

XX PT understanding or treating genetic disease, comprises detecting tandem

PT repeats in a target coding sequence and scoring the repeats for

PT polymorphic probability.

XX Example; Col 539; 586pp; English.

XX CC The invention discloses a method for identifying a candidate polymorphic

CC repeat within a coding sequence (expressed sequence tag, EST), which

CC comprises detecting tandem repeats in a target coding sequence, scoring

CC the repeats for polymorphic probability and generating a dataset

CC correlating the repeats with polymorphic probability to identify a

CC candidate polymorphic repeat. The computational methods (polymorphic

CC marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are

CC useful for identifying and detecting candidate polymorphic repeats in

CC human genes, which can be used to understand, treat or eliminate genetic

CC diseases, predispositions or adverse drug-treatment reactions. Examples

CC of diseases linked to nucleotide repeats are Machado-Joseph, Haw River

CC syndrome, Huntington's disease, fragile-X syndrome, Friedreich's ataxia,

CC myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and

CC spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are

CC the polymorphic repeats identified for a search of human ESTs

XX SQ Sequence 12 BP; 0 A; 5 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 2.0%; Score 12; DB 1; Length 12;

Best Local Similarity 100.0%; Pred. No. 1.8e+02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 115 CCCCCGGGGGCC 126

DB 12 CCCCCGGGGGCC 1

RESULT 257

ABF38253

ID ABF38253 standard; DNA; 13 BP.

XX AC ABF38253;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 138250 for detecting SNP TSC0034601.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB0000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX PS Claim 1; SEQ ID NO 138250; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABT00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 2 A; 9 C; 2 G; 0 T; 0 U; 0 Other;
 Query Match 2.0%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 125 CCGCCCGCGCAC 136

Db 2 CCGCCCGCGCAC 13

RESULT 258

ID ABH40339 standard; DNA; 13 BP.

XX AC ABH40339;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 240316 for detecting SNP TSC0058620.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

PN WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

PS Claim 1; SEQ ID NO 240316; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 2.0%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 ACATCCATTATA 64

Db 2 ACATCCATTATA 13

RESULT 259

ID ABH33977/C

XX ABH33977 standard; DNA; 13 BP.

XX AC ABH33977;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 233954 for detecting SNP TSC0057094.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

PN WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 233954; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 4 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 2.0%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 38 AGATAGTGATGA 49

Db 12 AGATAGTGATGA 1

RESULT 260

ID ABF96336

XX ABF96336 standard; DNA; 13 BP.

XX AC ABF96336;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 196333 for detecting SNP TSC0048324.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 196333; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 0 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 2.0%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 396 GGTGGTGGAGGA 407
 Db 2 GGTGGTGGAGGA 13
 |||||
 |||||
 RESULT 261
 ABF38252/C
 ID ABF38252 standard; DNA; 13 BP.
 AC
 AC ABF38252;
 XX
 XX 21-FEB-2002 (first entry)
 DT
 DE Oligonucleotide SEQ ID NO 138249 for detecting SNP TSC0034501.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 240315; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 138249; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 0 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 2.0%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 125 CCGCCCCCGCAC 136
 Db 12 CCGCCCCCGCAC 1
 |||||
 |||||
 RESULT 262
 ABH40338/C
 ID ABH40338 standard; DNA; 13 BP.
 XX
 AC ABH40338;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 DE Oligonucleotide SEQ ID NO 240315 for detecting SNP TSC0058620.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 OS
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 240315; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
 SQ

Query Match 2.0%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 ACATCCATTATA 64
 DB 12 ACATCCATTATA 1
 |||||

RESULT 263
 ABH11327
 ID ABH11327 standard; DNA; 13 BP.
 XX
 AC ABH11327;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 211304 for detecting SNP TSC0051543.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 211304; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 1 A; 7 C; 0 G; 4 T; 0 U; 1 Other;
 SQ

Query Match 2.0%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 144 CTCTCTCTCCCA 155
 DB 2 CTCTCTCTCCCA 13
 |||||

RESULT 264
 ABH33976
 ID ABH33976 standard; DNA; 13 BP.
 XX
 AC ABH33976;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 233953 for detecting SNP TSC0057094.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 233953; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 5 A; 0 C; 4 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 2.0%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 38 AGATAGTGATGA 49
 DB 2 AGATAGTGATGA 13
 |||||

RESULT 265
 ABF96337/c
 ID ABF96337 standard; DNA; 13 BP.

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XX AC ABF96337;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 196334 for detecting SNP TSC0048324.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIC-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 196334; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 8 C; 0 G; 2 T; 0 U; 0 Other;
XX Query Match 2.0%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 396 GGTGGTGGAGGA 407
XX Db 12 GGTGGTGGAGGA 1
XX RESULT 266
XX ABH11326/c
XX ID ABH11326 standard; DNA; 13 BP.
XX AC ABH11326;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 211303 for detecting SNP TSC0051543.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.

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PN WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIC-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 211303; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 4 A; 0 C; 7 G; 1 T; 0 U; 1 Other;
XX Query Match 2.0%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 144 CTCCTCCTCCCA 155
XX Db 12 CTCCTCCTCCCA 1
XX RESULT 267
XX ADB98866/c
XX ID ADB98866 standard; DNA; 13 BP.
XX AC ADB98866;
XX DT 04-DEC-2003 (first entry)
XX DE Mutated LRP5 exon fragment #28.
XX KW Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
XX KW bone mass modulation; osteoporosis; ds.
XX OS Synthetic.
XX PN WO200292000-A2.
XX PD 21-NOV-2002.
XX PF 13-MAY-2002; 2002WO-US014877.
XX PR 11-MAY-2001; 2001US-0290071P.
XX PR 17-MAY-2001; 2001US-029311P.
XX PR 01-FEB-2002; 2002US-0353058P.
XX PR 04-MAR-2002; 2002US-0361293P.
XX PA (GENO-) GENOME THERAPEUTICS CORP.
XX PA (AMVP) WYETH.

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PI Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;
XX WPI; 2003-129214/12.
DR
XX
PT New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
PT diagnosing a HBM-like phenotype in a subject and for preparing a
PT composition for modulating bone mass and/or lipid levels in a subject
PT suffering from e.g. osteoporosis.
XX
XX
PS Disclosure; Page 51; 629pp; English.
XX
CC The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
CC LRP6 mutants, which results in a HBM-like phenotype when expressed in a
CC cell. The HBM-like phenotype results in bone mass modulation and/or lipid
CC level modulation. The invention is useful for diagnosing a HBM-like
CC phenotype in a subject and for preparing a composition for modulating
CC bone mass and/or lipid levels in a subject suffering from e.g.
CC osteoporosis. The present sequence was used to illustrate the invention.
XX
SQ Sequence 13 BP; 1 A; 4 C; 8 G; 0 T; 0 U; 0 Other;
Query Match 2.0%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 222 CCGGCTGCCCC 233
Db 13 CCGGCTGCCCC 2

Search completed: September 22, 2004, 08:55:20
Job time : 3 secs

Blank sheet

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: September 22, 2004, 08:58:46 ; Search time 1 seconds
(without alignments)

4.533 Million cell updates/sec

Title: US-09-375-514B-22

Perfect score: 615

Sequence: 1 atggcgacgtggagac.....ctggatgtgagctctgggc 615

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 199 seqs, 3685 residues

Total number of hits satisfying chosen parameters: 398

Minimum DB seq length: 10

Maximum DB seq length: 40

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 200 summaries

Database : rnpb22.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	39	6.3	39	1	US-10-343-859-28
2	37.4	6.1	39	1	US-10-343-859-29
3	37	6.0	39	1	US-10-343-859-27
4	27	4.4	27	1	US-10-087-223-3
5	27	4.4	27	1	US-10-087-223-4
6	27	4.4	27	1	US-10-087-223-5
7	27	4.4	27	1	US-10-087-223-6
8	27	4.4	27	1	US-10-087-223-7
9	27	4.4	27	1	US-10-222-943A-3
10	27	4.4	27	1	US-10-222-943A-4
11	27	4.4	27	1	US-10-222-943A-5
12	27	4.4	27	1	US-10-222-943A-6
13	27	4.4	27	1	US-10-222-943A-7
14	25.4	4.1	27	1	US-10-148-953A-15
15	24	3.9	24	1	US-09-920-342-11
16	24	3.9	24	1	US-10-384-260-2
17	23	3.7	23	1	US-10-714-310-21
18	22.4	3.6	24	1	US-09-371-900-11
19	22.4	3.6	24	1	US-09-970-820-11
20	22.4	3.6	24	1	US-09-986-718-11
21	22.4	3.6	24	1	US-10-186-950-11
22	22	3.6	22	1	US-09-931-732-21
23	22	3.6	22	1	US-10-142-566-51
24	22	3.6	22	1	US-10-142-666-87
25	22	3.6	22	1	US-10-313-668-228
26	22	3.6	22	1	US-10-384-260-1
27	21	3.4	21	1	US-10-087-223-1
28	21	3.4	21	1	US-10-222-943A-1
29	20	3.3	20	1	US-10-087-223-2
30	20	3.3	20	1	US-10-222-943A-2
31	20	3.3	20	1	US-10-053-645A-3
32	20	3.3	20	1	US-10-714-310-29
33	20	3.3	20	1	US-10-714-310-30

1	US-10-714-310-31	20	3.3	20	34	C	34	Sequence 31, Appl
1	US-09-932-129-1	19	3.1	19	35	C	35	Sequence 1, Appl
1	US-10-409-107A-31	19	3.1	19	36	C	36	Sequence 31, Appl
1	US-10-033-024A-23	19	3.1	19	37	C	37	Sequence 23, Appl
1	US-10-621-009-1	19	3.1	19	38	C	38	Sequence 1, Appl
1	US-09-932-300-72	20	3.0	20	39	C	39	Sequence 72, Appl
1	US-09-781-980-1	20	3.0	20	40	C	40	Sequence 3, Appl
1	US-09-781-980-3	20	3.0	20	41	C	41	Sequence 3, Appl
1	US-09-824-468-59	18	2.9	18	42	C	42	Sequence 59, Appl
1	US-09-824-468-104	18	2.9	18	43	C	43	Sequence 104, App
1	US-09-965-116A-7	18	2.9	18	44	C	44	Sequence 7, Appl
1	US-09-965-116A-77	18	2.9	18	45	C	45	Sequence 77, Appl
1	US-09-965-116A-98	18	2.9	18	46	C	46	Sequence 98, Appl
1	US-09-965-116A-99	18	2.9	18	47	C	47	Sequence 99, Appl
1	US-09-800-266A-51	18	2.9	18	48	C	48	Sequence 51, Appl
1	US-09-895-007A-51	18	2.9	18	49	C	49	Sequence 51, Appl
1	US-09-835-371-21	18	2.9	18	50	C	50	Sequence 21, Appl
1	US-09-920-313-51	18	2.9	18	51	C	51	Sequence 51, Appl
1	US-09-835-370-21	18	2.9	18	52	C	52	Sequence 21, Appl
1	US-09-888-326-755	18	2.9	18	53	C	53	Sequence 755, App
1	US-09-888-326-756	18	2.9	18	54	C	54	Sequence 756, App
1	US-09-931-732-20	18	2.9	18	55	C	55	Sequence 20, Appl
1	US-09-818-918-55	18	2.9	18	56	C	56	Sequence 55, Appl
1	US-09-776-479-1	18	2.9	18	57	C	57	Sequence 1, Appl
1	US-09-776-479-1	18	2.9	18	58	C	58	Sequence 1, Appl
1	US-09-776-479-54	18	2.9	18	59	C	59	Sequence 54, Appl
1	US-09-776-479-55	18	2.9	18	60	C	60	Sequence 54, Appl
1	US-09-776-479-55	18	2.9	18	61	C	61	Sequence 55, Appl
1	US-09-776-479-55	18	2.9	18	62	C	62	Sequence 55, Appl
1	US-09-776-479-91	18	2.9	18	63	C	63	Sequence 91, Appl
1	US-09-776-479-91	18	2.9	18	64	C	64	Sequence 91, Appl
1	US-09-554-987B-115	18	2.9	18	65	C	65	Sequence 115, App
1	US-09-895-480A-14	18	2.9	18	66	C	66	Sequence 14, Appl
1	US-09-967-464-4	18	2.9	18	67	C	67	Sequence 4, Appl
1	US-10-333-381-46	18	2.9	18	68	C	68	Sequence 46, Appl
1	US-09-760-506-2	18	2.9	18	69	C	69	Sequence 2, Appl
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1	US-10-314-578-54	18	2.9	18	71	C	71	Sequence 1, Appl
1	US-10-314-578-55	18	2.9	18	72	C	72	Sequence 54, Appl
1	US-10-314-578-91	18	2.9	18	73	C	73	Sequence 55, Appl
1	US-10-434-696-51	18	2.9	18	74	C	74	Sequence 51, Appl
1	US-10-023-909A-51	18	2.9	18	75	C	75	Sequence 51, Appl
1	US-10-112-653-1	18	2.9	18	76	C	76	Sequence 1, Appl
1	US-10-112-653-85	18	2.9	18	77	C	77	Sequence 85, Appl
1	US-10-017-995-1	18	2.9	18	78	C	78	Sequence 1, Appl
1	US-10-017-995-54	18	2.9	18	79	C	79	Sequence 54, Appl
1	US-10-017-995-55	18	2.9	18	80	C	80	Sequence 55, Appl
1	US-10-017-995-91	18	2.9	18	81	C	81	Sequence 91, Appl
1	US-10-002-884A-6	18	2.9	18	82	C	82	Sequence 6, Appl
1	US-10-300-247-51	18	2.9	18	83	C	83	Sequence 51, Appl
1	US-10-161-229-53	18	2.9	18	84	C	84	Sequence 53, Appl
1	US-10-142-566-45	18	2.9	18	85	C	85	Sequence 45, Appl
1	US-10-290-545-9	18	2.9	18	86	C	86	Sequence 9, Appl
1	US-10-290-545-24	18	2.9	18	87	C	87	Sequence 24, Appl
1	US-10-362-318-6	18	2.9	18	88	C	88	Sequence 6, Appl
1	US-10-324-523-40	18	2.9	18	89	C	89	Sequence 40, Appl
1	US-10-379-164-2	18	2.9	18	90	C	90	Sequence 2, Appl
1	US-10-187-264A-45	18	2.9	18	91	C	91	Sequence 45, Appl
1	US-10-365-072-112	18	2.9	18	92	C	92	Sequence 112, App
1	US-10-365-623-15	18	2.9	18	93	C	93	Sequence 15, Appl
1	US-10-142-666-9	18	2.9	18	94	C	94	Sequence 9, Appl
1	US-10-053-645A-17	18	2.9	18	95	C	95	Sequence 17, Appl
1	US-10-053-645A-24	18	2.9	18	96	C	96	Sequence 24, Appl
1	US-10-140-013-1	18	2.9	18	97	C	97	Sequence 1, Appl
1	US-10-140-013-2	18	2.9	18	98	C	98	Sequence 2, Appl
1	US-10-306-522-45	18	2.9	18	99	C	99	Sequence 45, Appl
1	US-10-233-902-6	18	2.9	18	100	C	100	Sequence 6, Appl
1	US-10-437-263-9	18	2.9	18	101	C	101	Sequence 9, Appl
1	US-10-437-263-24	18	2.9	18	102	C	102	Sequence 24, Appl
1	US-10-437-275-9	18	2.9	18	103	C	103	Sequence 9, Appl
1	US-10-437-275-24	18	2.9	18	104	C	104	Sequence 24, Appl
1	US-10-437-136-218	18	2.9	18	105	C	105	Sequence 218, App
1	US-10-437-136-218	18	2.9	18	106	C	106	Sequence 218, App

C 180	14	2.3	14	1	US-10-714-310-34	Sequence 34, Appl
C 181	13.4	2.2	39	1	US-10-343-859-29	Sequence 29, Appl
C 182	13	2.1	13	1	US-10-156-433-5	Sequence 5, Appl
C 183	13	2.1	13	1	US-10-156-433-6	Sequence 6, Appl
C 184	13	2.1	13	1	US-10-156-433-8	Sequence 8, Appl
C 185	13	2.1	13	1	US-10-156-433-9	Sequence 9, Appl
C 186	13	2.1	13	1	US-10-156-433-10	Sequence 10, Appl
C 187	13	2.1	13	1	US-10-156-433-11	Sequence 11, Appl
C 188	13	2.1	13	1	US-10-156-433-12	Sequence 12, Appl
C 189	13	2.1	13	1	US-10-156-433-13	Sequence 13, Appl
C 190	13	2.1	13	1	US-10-112-814-5	Sequence 5, Appl
C 191	13	2.1	13	1	US-10-112-814-6	Sequence 6, Appl
C 192	13	2.1	13	1	US-10-112-814-8	Sequence 8, Appl
C 193	13	2.1	13	1	US-10-112-814-9	Sequence 9, Appl
C 194	13	2.1	13	1	US-10-112-814-10	Sequence 10, Appl
C 195	13	2.1	13	1	US-10-112-814-11	Sequence 11, Appl
C 196	13	2.1	13	1	US-10-112-814-12	Sequence 12, Appl
C 197	13	2.1	13	1	US-10-112-814-13	Sequence 13, Appl
C 198	13	2.1	13	1	US-10-714-310-13	Sequence 13, Appl
C 199	12	2.0	12	1	US-10-076-047A-177	Sequence 177, App
C 200	12	2.0	12	1	US-10-076-047A-255	Sequence 255, App

ALIGNMENTS

RESULT 1

US-10-343-859-28

Sequence 28, Application US/10343859

Publication No. US20040110161A1

GENERAL INFORMATION:

APPLICANT: Nanogen Recognomics GMBH

TITLE OF INVENTION: Method for detecting mutations in

TITLE OF INVENTION: nucleotide sequences

FILE REFERENCE: 612,406-033

CURRENT APPLICATION NUMBER: US/10/343,859

CURRENT FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: PCT/EP01/08127

PRIOR FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: 10038237.1

PRIOR FILING DATE: 2000-08-04

NUMBER OF SEQ ID NOS: 52

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 28

LENGTH: 39

TYPE: DNA

ORGANISM: Homo sapiens

US-10-343-859-28

Query Match 6.3%; Score 39; DB 1; Length 39;

Best Local Similarity 100.0%; Pred. No. 1.4;

Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 155 AGCCGGGACACGCCGCCATCCAGCGGATCCCGGACC 193

Db 1 AGCCGGGACACGCCGCCATCCAGCGGATCCCGGACC 39

RESULT 2

US-10-343-859-29

Sequence 29, Application US/10343859

Publication No. US20040110161A1

GENERAL INFORMATION:

APPLICANT: Nanogen Recognomics GMBH

TITLE OF INVENTION: Method for detecting mutations in

TITLE OF INVENTION: nucleotide sequences

FILE REFERENCE: 612,406-033

CURRENT APPLICATION NUMBER: US/10/343,859

CURRENT FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: PCT/EP01/08127

PRIOR FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: 10038237.1

PRIOR FILING DATE: 2000-08-04


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US-10-087-229-6
; Sequence 6, Application US/10087229
; Publication No. US20030162184A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled
; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
; FILE REFERENCE: BIOS-001
; CURRENT APPLICATION NUMBER: US/10/087,229
; CURRENT FILING DATE: 2002-02-27
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 27
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-10-087-229-6

Query Match 4.4%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 522 CCTGTGGATGACTGAGTACCTGAACCG 548
DB 1 CCTGTGGATGACTGAGTACCTGAACCG 27

RESULT 8
US-10-087-229-7
; Sequence 7, Application US/10087229
; Publication No. US20030162184A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled
; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
; FILE REFERENCE: BIOS-001
; CURRENT APPLICATION NUMBER: US/10/087,229
; CURRENT FILING DATE: 2002-02-27
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 27
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-10-087-229-7

Query Match 4.4%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 522 CCTGTGGATGACTGAGTACCTGAACCG 548
DB 1 CCTGTGGATGACTGAGTACCTGAACCG 27

RESULT 9
US-10-222-943A-3
; Sequence 3, Application US/10222943A
; Publication No. US20030165920A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla JR, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled
; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
US-10-222-943A-3

Query Match 4.4%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 522 CCTGTGGATGACTGAGTACCTGAACCG 548
DB 1 CCTGTGGATGACTGAGTACCTGAACCG 27

RESULT 10
US-10-222-943A-4
; Sequence 4, Application US/10222943A
; Publication No. US20030165920A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla JR, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled
; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
; FILE REFERENCE: BIOS-001CIP
; CURRENT APPLICATION NUMBER: US/10/222,943A
; CURRENT FILING DATE: 2002-08-15
; PRIOR APPLICATION NUMBER: 10/087,229
; PRIOR FILING DATE: 2002-02-27
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 27
; TYPE: DNA
; ORGANISM: human
US-10-222-943A-4

Query Match 4.4%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 522 CCTGTGGATGACTGAGTACCTGAACCG 548
DB 1 CCTGTGGATGACTGAGTACCTGAACCG 27

RESULT 11
US-10-222-943A-5
; Sequence 5, Application US/10222943A
; Publication No. US20030165920A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla JR, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled
; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
; FILE REFERENCE: BIOS-001CIP
; CURRENT APPLICATION NUMBER: US/10/222,943A
; CURRENT FILING DATE: 2002-08-15
; PRIOR APPLICATION NUMBER: 10/087,229
; PRIOR FILING DATE: 2002-02-27
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 27

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Db	1	CCTGTGGATGACTGAGTACTGAACCG	27
Db	1	CCTGTGGATGACTGAGTACTGAACCG	27
QY	522	CCTGTGGATGACTGAGTACTGAACCG	548
Db	1	CCTGTGGATGACTGAGTACTGAACCG	27
RESULT 12			
US-10-222-943A-6			
Sequence 6, Application US/10222943A			
Publication No. US20030165920A1			
GENERAL INFORMATION:			
APPLICANT: Chou, Quin			
APPLICANT: Cabradilla JR, Cirillo D.			
TITLE OF INVENTION: Methods of Using FET Labeled			
TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant			
TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same			
FILE REFERENCE: BIOS-001CIP			
CURRENT APPLICATION NUMBER: US/10/222,943A			
PRIOR FILING DATE: 2002-08-15			
PRIOR APPLICATION NUMBER: 10/087,229			
PRIOR FILING DATE: 2002-02-27			
NUMBER OF SEQ ID NOS: 25			
SOFTWARE: Fast-SEQ for Windows Version 4.0			
SEQ ID NO 6			
LENGTH: 27			
TYPE: DNA			
ORGANISM: human			
US-10-222-943A-6			
Query Match	4.4%;	Score 27;	DB 1; Length 27;
Best Local Similarity	100.0%;	Pred. No. 14;	
Matches	27;	Conservative 0;	Mismatches 0; Indels 0; Gaps 0;
QY	522	CCTGTGGATGACTGAGTACTGAACCG	548
Db	1	CCTGTGGATGACTGAGTACTGAACCG	27
RESULT 13			
US-10-222-943A-7			
Sequence 7, Application US/10222943A			
Publication No. US20030165920A1			
GENERAL INFORMATION:			
APPLICANT: Chou, Quin			
APPLICANT: Cabradilla JR, Cirillo D.			
TITLE OF INVENTION: Methods of Using FET Labeled			
TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant			
TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same			
FILE REFERENCE: BIOS-001CIP			
CURRENT APPLICATION NUMBER: US/10/222,943A			
PRIOR FILING DATE: 2002-08-15			
PRIOR APPLICATION NUMBER: 10/087,229			
PRIOR FILING DATE: 2002-02-27			
NUMBER OF SEQ ID NOS: 25			
SOFTWARE: Fast-SEQ for Windows Version 4.0			
SEQ ID NO 7			
LENGTH: 27			
TYPE: DNA			
ORGANISM: human			
US-10-222-943A-7			
Query Match	4.4%;	Score 27;	DB 1; Length 27;
Best Local Similarity	100.0%;	Pred. No. 14;	
Matches	27;	Conservative 0;	Mismatches 0; Indels 0; Gaps 0;
QY	522	CCTGTGGATGACTGAGTACTGAACCG	548
Db	1	CCTGTGGATGACTGAGTACTGAACCG	27
US-10-222-943A-5			
Sequence 5, Application US/10148953A			
Publication No. US20040053228A1			
GENERAL INFORMATION:			
APPLICANT: SHIBAZAKI, FUTOSHI			
APPLICANT: KUMA, HIDEKAZU			
TITLE OF INVENTION: APOPTOSIS-INHIBITING POLYPEPTIDES, GENES AND POLYNUCLEOTIDES			
TITLE OF INVENTION: ENCODING SAME, AND COMPOSITIONS CONTAINING THEM			
FILE REFERENCE: 7388/73088			
CURRENT APPLICATION NUMBER: US/10/148,953A			
CURRENT FILING DATE: 2003-04-10			
PRIOR APPLICATION NUMBER: PCT/JP00/08667			
PRIOR FILING DATE: 2000-12-07			
PRIOR APPLICATION NUMBER: JP 11/350427			
PRIOR FILING DATE: 1999-12-09			
NUMBER OF SEQ ID NOS: 21			
SOFTWARE: PatentIn Ver. 2.1			
SEQ ID NO 15			
LENGTH: 27			
TYPE: DNA			
ORGANISM: Artificial Sequence			
FEATURE:			
OTHER INFORMATION: Description of Artificial Sequence: Primer			
US-10-148-953A-15			
Query Match	4.1%;	Score 25.4;	DB 1; Length 27;
Best Local Similarity	96.3%;	Pred. No. 20;	
Matches	26;	Conservative 0;	Mismatches 1; Indels 0; Gaps 0;
QY	334	TTCGCCGAGATGTCACGCCAGCTGCAC	360
Db	27	TTCGCCGAGATGTCACGCCAGCTGCAC	1
US-09-920-342-11			
Sequence 11, Application US/09920342			
Patent No. US20020137709A1			
GENERAL INFORMATION:			
APPLICANT: University of Southern California			
APPLICANT: Lin, Shi-lung			
APPLICANT: Chuong, Cheng-Ming			
APPLICANT: Wigdeltz, Randall B.			
TITLE OF INVENTION: GENE SILENCING USING MRNA-CDNA HYBRIDS			
FILE REFERENCE: 13761-7024			


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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/970,820
;   FILING DATE: 05-Oct-2001
;   CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 08/386,844
;   FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
;   NAME: Coruzzi, Laura A.
;   REGISTRATION NUMBER: 30,742
;   REFERENCE/DOCKET NUMBER: 7853-032
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (212) 790-9090
;   TELEFAX: (212) 869-8864
;   TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 24 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;     MOLECULE TYPE: DNA (genomic)
;     HYPOTHETICAL: NO
;     SEQUENCE DESCRIPTION: SEQ ID NO: 11:
US-09-970-820-11

Query Match      3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 34;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GCACGGGTGAAGTGGGGAGGAT 440
Db 24 GGATGGGTGAAGTGGGGAGGAT 1

RESULT 20
US-09-986-718-11/c
; Sequence 11, Application US/09986718
; Patent No. US20020178458A1
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/986,718
;   FILING DATE: 09-No. US20020178458A1-2001
;   CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: 08/485,573
;   FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
;   NAME: Coruzzi, Laura A.
;   REGISTRATION NUMBER: 30,742
;   REFERENCE/DOCKET NUMBER: 7853-032
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (212) 790-9090
;   TELEFAX: (212) 869-8864

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;
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 24 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;     MOLECULE TYPE: DNA (genomic)
;     HYPOTHETICAL: NO
;     SEQUENCE DESCRIPTION: SEQ ID NO: 11:
US-09-986-718-11

Query Match      3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 34;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GCACGGGTGAAGTGGGGAGGAT 440
Db 24 GGATGGGTGAAGTGGGGAGGAT 1

RESULT 21
US-10-186-950-11/c
; Sequence 11, Application US/10186950
; Publication No. US20030188327A1
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/10/186,950
;   FILING DATE: 02-Jul-2002
;   CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US/08/944,496
;   FILING DATE: <Unknown>
;   APPLICATION NUMBER: US 08/599,654
;   FILING DATE: 09-FEB-1996
;   APPLICATION NUMBER: US 08/485,573
;   FILING DATE: 07-JUN-1995
;   APPLICATION NUMBER: US 08/386,844
;   FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
;   NAME: CORUZZI, LAURA A.
;   REGISTRATION NUMBER: 30,742
;   REFERENCE/DOCKET NUMBER: 7853-104
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (212) 790-9090
;   TELEFAX: (212) 869-8864
;   TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 24 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;     MOLECULE TYPE: other nucleic acid
;     DESCRIPTION: /desc = "synthetic oligonucleotide"
;     HYPOTHETICAL: NO
;     SEQUENCE DESCRIPTION: SEQ ID NO: 11:

```

US-10-186-950-11

Query Match 3.6%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 34;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 417 GGAGGGGTGAAGTGGGGAGGAT 440
DB 24 GGATGGGTGAAGTGGGGAGGAT 1

RESULT 22

US-09-931-732-21
; Sequence 21, Application US/09931732
; Publication No. US20030045488A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; APPLICANT: Riley, Timothy A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES COMPRISING
; FILE OF INVENTION: UNIVERSAL AND/OR DEGENERATE BASES
; FILE REFERENCE: OASBIO.001C1
; CURRENT APPLICATION NUMBER: US/09/931,732
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: PCT/US00/09293
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: US 60/128,377
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide primers
US-09-931-732-21

Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 264 GGTGCCACCTGTGTCCACCTG 285
DB 1 GGTGCCACCTGTGTCCACCTG 22

RESULT 23

US-10-142-566-51
; Sequence 51, Application US/10142566
; Publication No. US20030119016A1
; GENERAL INFORMATION:
; APPLICANT: Riley, Timothy A.
; APPLICANT: Brown, Bob D.
; APPLICANT: Arnold, Lyle J.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES WITH INCREASED RNASE SENSITIVITY
; FILE REFERENCE: OASBIO.003DV1
; CURRENT APPLICATION NUMBER: US/10/142,566
; CURRENT FILING DATE: 2002-08-06
; PRIOR APPLICATION NUMBER: US 09/136,080
; PRIOR FILING DATE: 1998-08-18
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 51
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-10-142-566-51

Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 264 GGTGCCACCTGTGTCCACCTG 285
DB 1 GGTGCCACCTGTGTCCACCTG 22

RESULT 24

US-10-142-666-87
; Sequence 87, Application US/10142666
; Publication No. US20030171315A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; APPLICANT: Riley, Timothy A.
; TITLE OF INVENTION: OLIGONUCLEOTIDE PROBES AND PRIMERS
; TITLE OF INVENTION: COMPRISING UNIVERSAL BASES FOR THERAPEUTIC PURPOSES
; FILE REFERENCE: OASBIO.016A
; CURRENT APPLICATION NUMBER: US/10/142,666
; CURRENT FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: 60/306,229
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: 09/136,080
; PRIOR FILING DATE: 1998-08-18
; PRIOR APPLICATION NUMBER: 60/060,673
; PRIOR FILING DATE: 1997-10-02
; NUMBER OF SEQ ID NOS: 88
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 87
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificial oligonucleotides
US-10-142-666-87

Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 264 GGTGCCACCTGTGTCCACCTG 285
DB 1 GGTGCCACCTGTGTCCACCTG 22

RESULT 25

US-10-313-669-228
; Sequence 228, Application US/10313669
; Publication No. US20030175761A1
; GENERAL INFORMATION:
; APPLICANT: Greenlee, Winner and Sullivan, P.C.
; TITLE OF INVENTION: Identification of genes whose expression patterns distinguish ben
; TITLE OF INVENTION: lymphoid tissue and mantle cell, follicular, and small lymphocyt
; FILE REFERENCE: 142-01
; CURRENT APPLICATION NUMBER: US/10/313,669
; CURRENT FILING DATE: 2002-12-06
; NUMBER OF SEQ ID NOS: 302
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 228
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-313-669-228

Query Match 3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 529 ATGACTGAGTACTGTAACCGGC 550
DB 1 ATGACTGAGTACTGTAACCGGC 22

RESULT 26

US-10-384-260-1

```

; Sequence 1, Application US/10384260
; Publication No. US2004000181A1
; GENERAL INFORMATION:
; APPLICANT: Kreutzer, Roland
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR INHIBITING EXPRESSION OF ANTI-APOPTIC
; FILE REFERENCE: 20200/2102
; CURRENT APPLICATION NUMBER: US/10/384,260
; PRIOR FILING DATE: 2003-03-07
; PRIOR APPLICATION NUMBER: DE 10100586.5
; PRIOR FILING DATE: 2001-01-09
; PRIOR APPLICATION NUMBER: PCT/EP02/00151
; PRIOR FILING DATE: 2002-01-09
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 22
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: sense strand of dsRNA that is complementary to a sequence of the
; OTHER INFORMATION: human Bcl-2 gene
US-10-384-260-1

```

```

Query Match          3.6%; Score 22; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 35;
Matches 20; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 201 CAGGACCTCGCGCTGCAGACC 222
Db 1 CAGGACCTCGCGCTGCAGACC 22
|||||

```

RESULT 27

```

US-10-087-229-1
; Sequence 1, Application US/10087229
; Publication No. US20030162184A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled
; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
; FILE REFERENCE: BIOS-001
; CURRENT APPLICATION NUMBER: US/10/087,229
; CURRENT FILING DATE: 2002-02-27
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-10-087-229-1

```

```

Query Match          3.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 396 GGTGGTGGAGGAGCTCTTCAG 416
Db 1 GGTGGTGGAGGAGCTCTTCAG 21
|||||

```

RESULT 28

```

US-10-222-943A-1
; Sequence 1, Application US/10222943A
; Publication No. US20030165920A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla JR, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled

```

```

; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
; FILE REFERENCE: BIOS-001CIP
; CURRENT APPLICATION NUMBER: US/10/222,943A
; CURRENT FILING DATE: 2002-08-15
; PRIOR APPLICATION NUMBER: 10/087,229
; PRIOR FILING DATE: 2002-02-27
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 21
; TYPE: DNA
; ORGANISM: human
US-10-222-943A-1

```

```

Query Match          3.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 396 GGTGGTGGAGGAGCTCTTCAG 416
Db 1 GGTGGTGGAGGAGCTCTTCAG 21
|||||

```

RESULT 29

```

US-10-087-229-2/c
; Sequence 2, Application US/10087229
; Publication No. US20030162184A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled
; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
; FILE REFERENCE: BIOS-001
; CURRENT APPLICATION NUMBER: US/10/087,229
; CURRENT FILING DATE: 2002-02-27
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-10-087-229-2

```

```

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 566 TCCAGGATAACGGAGGCTGG 585
Db 20 TCCAGGATAACGGAGGCTGG 1
|||||

```

RESULT 30

```

US-10-222-943A-2/c
; Sequence 2, Application US/10222943A
; Publication No. US20030165920A1
; GENERAL INFORMATION:
; APPLICANT: Chou, Quin
; APPLICANT: Cabradilla JR, Cirilo D.
; TITLE OF INVENTION: Methods of Using FET Labeled
; TITLE OF INVENTION: Oligonucleotides That Include a 3'-5' Exonuclease Resistant
; TITLE OF INVENTION: Quencher Domain and Compositions for Practicing the Same
; FILE REFERENCE: BIOS-001CIP
; CURRENT APPLICATION NUMBER: US/10/222,943A
; CURRENT FILING DATE: 2002-08-15
; PRIOR APPLICATION NUMBER: 10/087,229
; PRIOR FILING DATE: 2002-02-27
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0

```

```
; SEQ ID NO 2
; LENGTH: 20
; TYPE: DNA
; ORGANISM: human
US-10-222-943A-2

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 566 TCCAGGATAACGGAGCTGG 585
DB 20 TCCAGGATAACGGAGCTGG 1

RESULT 31
US-10-053-645A-3/c
; Sequence 3, Application US/10053645A
; Publication No. US20030176376A1
; GENERAL INFORMATION:
; APPLICANT: Robert E. Klem
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING A
; TITLE OF INVENTION: CELL-PROLIFERATIVE DISORDER USING CRE DECOY OLIGOMERS, BCL-2
; TITLE OF INVENTION: ANTISENSE OLIGOMERS, AND HYBRID OLIGOMERS THEREOF
; FILE REFERENCE: 10412-022-999
; CURRENT APPLICATION NUMBER: US/10/053,645A
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: 60/263,244
; PRIOR FILING DATE: 2001-01-22
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence: Synthetic Antisense
; OTHER INFORMATION: Oligonucleotide
US-10-053-645A-3

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 577 GGAGGCTGGTAGGTGCATC 596
DB 20 GGAGGCTGGTAGGTGCATC 1

RESULT 32
US-10-714-310-29/c
; Sequence 29, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 29
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-29

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 596 TCCAGGATAACGGAGCTGG 585
DB 20 TCCAGGATAACGGAGCTGG 1

RESULT 33
US-10-714-310-30/c
; Sequence 30, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-30

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 330 CGACTTCGCCGAGATGCCA 349
DB 20 CGACTTCGCCGAGATGCCA 1

RESULT 34
US-10-714-310-31/c
; Sequence 31, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-31

Query Match          3.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 363 GAGGCCCTTCACCGCGCGG 382
DB 20 GAGGCCCTTCACCGCGCGG 1

RESULT 35
```



```

US-09-932-129-1
; Sequence 1, Application US/09932129
; Patent No. US20020119533A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; TITLE OF INVENTION: AMPLIFICATION PRIMER PAIRS AND USE
; FILE REFERENCE: OASBIO.002C1
; CURRENT APPLICATION NUMBER: US/09/932,129
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: PCT/US00/09230
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: US 60/128,378
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide primers
US-09-932-129-1

Query Match      3.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      267 GCCACCTGTGGTCCACCTG 285
Db      1 GCCACCTGTGGTCCACCTG 19

RESULT 36
US-10-409-107A-31
; Sequence 31, Application US/10409107A
; Publication No. US20040053288A1
; GENERAL INFORMATION:
; APPLICANT: YANAI, Yoshiaki
; APPLICANT: YAMAMOTO, Shigeto
; APPLICANT: YAMAMOTO, Kozo
; APPLICANT: IKEGAMI, Hakuo
; TITLE OF INVENTION: Method for estimating therapeutic efficacy of tumor necrosis
; FILE REFERENCE: YANAI=3
; CURRENT APPLICATION NUMBER: US/10/409,107A
; CURRENT FILING DATE: 2003-04-19
; PRIOR APPLICATION NUMBER: JP 107126/2002
; PRIOR FILING DATE: 2002-04-09
; NUMBER OF SEQ ID NOS: 100
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 31
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Oligonucleotide used as primer for PCR detection of Bcl-2 mRNA
US-10-409-107A-31

Query Match      3.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      356 TGCACCTGAGCCCTTCAC 374
Db      1 TGCACCTGAGCCCTTCAC 19

RESULT 37
US-10-033-024A-23
; Sequence 23, Application US/10033024A
; Publication No. US20030105043A1
; GENERAL INFORMATION:

```

```

; APPLICANT: Ho, Shuk-Mei
; APPLICANT: Lau, Kin-Mang
; APPLICANT: Lee, Kai-Pai
; TITLE OF INVENTION: APOPTOSIS-INDUCING RIBOZYMES
; FILE REFERENCE: 07917-110001
; CURRENT APPLICATION NUMBER: US/10/033,024A
; CURRENT FILING DATE: 2002-10-17
; PRIOR APPLICATION NUMBER: US 60/244,709
; PRIOR FILING DATE: 2000-10-31
; NUMBER OF SEQ ID NOS: 68
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 23
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: nt 386-404; forward primer for amplification from
; OTHER INFORMATION: Bcl-2 CDNA
US-10-033-024A-23

Query Match      3.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      356 TGCACCTGAGCCCTTCAC 374
Db      1 TGCACCTGAGCCCTTCAC 19

RESULT 38
US-10-621-009-1
; Sequence 1, Application US/10621009
; Publication No. US20040014129A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; TITLE OF INVENTION: AMPLIFICATION PRIMER PAIRS AND USE
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: OASBIO.002C2
; CURRENT APPLICATION NUMBER: US/10/621,009
; CURRENT FILING DATE: 2003-07-15
; PRIOR APPLICATION NUMBER: US 09/932,129
; PRIOR FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: PCT/US00/09230
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: US 60/128,378
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide primers
US-10-621-009-1

Query Match      3.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      267 GCCACCTGTGGTCCACCTG 285
Db      1 GCCACCTGTGGTCCACCTG 19

RESULT 39
US-09-932-300-72/c
; Sequence 72, Application US/09932300
; Publication No. US20030032788A1
; GENERAL INFORMATION:
; APPLICANT: GARVER, Eric
; APPLICANT: TU, Guang-Chou
; APPLICANT: ISRAEL, Yedy

```

FILE REFERENCE: 2502498.991110
CURRENT APPLICATION NUMBER: US/09/781,980
CURRENT FILING DATE: 2001-02-14
PRIOR APPLICATION NUMBER: DE 100 06 572
PRIOR FILING DATE: 2000-02-14
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-781-980-3

Query Match 3.0%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 67;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGAAC 20
|||||
DB 20 ATGGCACACGCTGGGAGAAC 1

RESULT 40
US-09-781-980-1/c
Sequence 1, Application US/09781980
Publication No. US20010029035A1
GENERAL INFORMATION:
APPLICANT: EISENHUT, MICHAEL
APPLICANT: MIER, WALTER
APPLICANT: ERITJIA, RAMON
APPLICANT: HABERKORN, UWE
TITLE OF INVENTION: OLIGONUCLEOTIDE CONJUGATES
FILE REFERENCE: 2502498.991110
CURRENT APPLICATION NUMBER: US/09/781,980
CURRENT FILING DATE: 2001-02-14
PRIOR APPLICATION NUMBER: DE 100 06 572
PRIOR FILING DATE: 2000-02-14
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-781-980-1

Query Match 3.0%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 67;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGAAC 20
|||||
DB 20 ATGGCACACGCTGGGAGAAC 1

RESULT 41
US-09-781-980-3
Sequence 3, Application US/09781980
Publication No. US20010029035A1
GENERAL INFORMATION:
APPLICANT: EISENHUT, MICHAEL
APPLICANT: MIER, WALTER
APPLICANT: ERITJIA, RAMON
APPLICANT: HABERKORN, UWE
TITLE OF INVENTION: OLIGONUCLEOTIDE CONJUGATES

FILE REFERENCE: 2502498.991110
CURRENT APPLICATION NUMBER: US/09/781,980
CURRENT FILING DATE: 2001-02-14
PRIOR APPLICATION NUMBER: DE 100 06 572
PRIOR FILING DATE: 2000-02-14
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-781-980-3

Query Match 3.0%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 67;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGAAC 20
|||||
DB 1 ATGGCACACGCTGGGAGAAC 20

RESULT 42

US-09-824-468-59/c
Sequence 59, Application US/09824468
Patent No. US20020064515A1
GENERAL INFORMATION:
APPLICANT: Krieger, Arthur M.
APPLICANT: Weiner, George
TITLE OF INVENTION: Methods and Products for Stimulating the
TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
TITLE OF INVENTION: Cytokines
FILE REFERENCE: C1039/7026/HCL
CURRENT APPLICATION NUMBER: US/09/824,468
CURRENT FILING DATE: 2001-04-02
PRIOR APPLICATION NUMBER: 09/286,098
PRIOR FILING DATE: 1999-04-02
NUMBER OF SEQ ID NOS: 105
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 59
LENGTH: 18
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Sequence
US-09-824-468-59

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGAGA 18
|||||
DB 18 ATGGCGCACGCTGGGAGAGA 1

RESULT 43

US-09-824-468-104/c
Sequence 104, Application US/09824468
Patent No. US20020064515A1
GENERAL INFORMATION:
APPLICANT: Krieger, Arthur M.
APPLICANT: Weiner, George
TITLE OF INVENTION: Methods and Products for Stimulating the
TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
TITLE OF INVENTION: Cytokines
FILE REFERENCE: C1039/7026/HCL
CURRENT APPLICATION NUMBER: US/09/824,468
CURRENT FILING DATE: 2001-04-02
PRIOR APPLICATION NUMBER: 09/286,098

```
; FILE REFERENCE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 104
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-104

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
   |||||
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 44
US-09-965-116A-7
; Sequence 7, Application US/09965116A
; Patent No. US20020137714A1
; GENERAL INFORMATION:
; APPLICANT: Kandimalla, Ekambar R.
; APPLICANT: Zhao, Qiuyan
; APPLICANT: Yu, Dong
; APPLICANT: Agrawal, Sudhir
; TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
; TITLE OF INVENTION: Modified oligodeoxynucleotide phosphorothioate Analogs by
; FILE REFERENCE: HY2-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; CURRENT FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthesis of end-blocked CpG-PS modified oligodeoxynucleotide
; OTHER INFORMATION: phosphorothioate
US-09-965-116A-7

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
   |||||
Db 1 ATGGCGCACGCTGGGAGA 18

RESULT 45
US-09-965-116A-77/c
; Sequence 77, Application US/09965116A
; Patent No. US20020137714A1
; GENERAL INFORMATION:
; APPLICANT: Kandimalla, Ekambar R.
; APPLICANT: Zhao, Qiuyan
; APPLICANT: Yu, Dong
; APPLICANT: Agrawal, Sudhir
; TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
; TITLE OF INVENTION: Modified oligodeoxynucleotide phosphorothioate Analogs by
; FILE REFERENCE: HY2-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; CURRENT FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthesis of end-blocked CpG-PS modified oligodeoxynucleotide
; OTHER INFORMATION: phosphorothioate
US-09-965-116A-7
```

```
; FILE REFERENCE: HY2-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; CURRENT FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: modified linkage of oligodeoxynucleotide phosphorothioate
US-09-965-116A-77

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
   |||||
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 46
US-09-965-116A-98/c
; Sequence 98, Application US/09965116A
; Patent No. US20020137714A1
; GENERAL INFORMATION:
; APPLICANT: Kandimalla, Ekambar R.
; APPLICANT: Zhao, Qiuyan
; APPLICANT: Yu, Dong
; APPLICANT: Agrawal, Sudhir
; TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
; TITLE OF INVENTION: Modified oligodeoxynucleotide phosphorothioate Analogs by
; FILE REFERENCE: HY2-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; CURRENT FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
US-09-965-116A-98

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
   |||||
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 47
US-09-965-116A-99/c
; Sequence 99, Application US/09965116A
; Patent No. US20020137714A1
; GENERAL INFORMATION:
```

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; APPLICANT: Kandimalla, Ekambar R.
; APPLICANT: Zhao, Qiyuan
; APPLICANT: Yu, Dong
; APPLICANT: Agrawal, Sudhir
; TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
; TITLE OF INVENTION: Modified oligodeoxynucleotide phosphorothioate Analogs by
; TITLE OF INVENTION: Positional Chemical Changes
; FILE REFERENCE: HVZ-479CP (47508.577)
; CURRENT APPLICATION NUMBER: US/09/965,116A
; PRIOR FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: US 09/712,898
; PRIOR FILING DATE: 2000-11-15
; PRIOR APPLICATION NUMBER: US 60/235,452
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US 60/235,453
; PRIOR FILING DATE: 2000-09-26
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 99
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
; NAME/KEY: modified_base
; LOCATION: 10,14
; OTHER INFORMATION: g at positions 10 and 14 = 7-deazaguanine
US-09-965-116A-99

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 48
US-09-800-266A-51/c
; Sequence 31, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; TITLE OF INVENTION: Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C10377/7017(HCL/NAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A
; CURRENT FILING DATE: 2001-03-05
; PRIOR APPLICATION NUMBER: US 60/187,214
; PRIOR FILING DATE: 2000-03-03
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-51

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

```

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RESULT 49
US-09-895-007A-51/c
; Sequence 51, Application US/09895007A
; Patent No. US20020185178A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
; TITLE OF INVENTION: TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
; FILE REFERENCE: C10411/7014 (AMS)
; CURRENT APPLICATION NUMBER: US/09/895,007A
; CURRENT FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: US 60/214,368
; PRIOR FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-51

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 50
US-09-835-371-21/c
; Sequence 21, Application US/09835371
; Publication No. US20020187473A1
; GENERAL INFORMATION:
; APPLICANT: UHLMANN, Eugen
; APPLICANT: BREIPOHL, Gerhard
; APPLICANT: WILL, David W
; TITLE OF INVENTION: POLYAMIDE NUCLEIC ACID DERIVATIVES, AND AGENTS AND
; TITLE OF INVENTION: PROCESSES FOR PREPARING THEM
; FILE REFERENCE: 02481.1743 SEQUENCE LISTING
; CURRENT APPLICATION NUMBER: US/09/835,371
; CURRENT FILING DATE: 2001-04-17
; NUMBER OF SEQ ID NOS: 53
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: base sequence
; OTHER INFORMATION: of PNA targeting CMV
US-09-835-371-21

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 51
US-09-920-313-51/c
; Sequence 51, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.

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; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Prevention and
; FILE REFERENCE: C1037/7019 (HCL/MAR)
; CURRENT APPLICATION NUMBER: US/09/920,313
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: US 60/222,248
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-920-313-51

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 52
US-09-835-370-21/c
; Sequence 21, Application US/09835370
; Publication No. US20030022172A1
; GENERAL INFORMATION:
; APPLICANT: UHLMANN, EUGEN
; APPLICANT: BREIPOHL, GERHARD
; APPLICANT: WILH, DAVID W
; TITLE OF INVENTION: POLYAMIDE NUCLEIC ACID DERIVATIVES AND AGENTS AND
; FILE REFERENCE: 02481.1742 SEQUENCE LISTING
; CURRENT APPLICATION NUMBER: US/09/835,370
; CURRENT FILING DATE: 2001-04-17
; NUMBER OF SEQ ID NOS: 64
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: nucleotide
; OTHER INFORMATION: base sequence of PNA derivatives that bind to
; OTHER INFORMATION: viral and cellular targets
US-09-835-370-21

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 53
US-09-888-326-755/c
; Sequence 755, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-08-22

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; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 755
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc:feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-755

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 54
US-09-888-326-756/c
; Sequence 756, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 756
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc:feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphodiester backbone
US-09-888-326-756

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 55
US-09-931-732-20/c
; Sequence 20, Application US/09931732
; Publication No. US20030045488A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; APPLICANT: Riley, Timothy A.
; TITLE OF INVENTION: OLIGONUCLEOTIDES COMPRISING
; FILE REFERENCE: UNIVERSAL AND/OR DEGENERATE BASES
; FILE REFERENCE: OASBIO.001C1
; CURRENT APPLICATION NUMBER: US/09/931,732
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: PCT/US00/09293

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; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: US 60/128,377
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide primers
US-09-931-732-20

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 56
US-09-818-918-55/c
; Sequence 55, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
; APPLICANT: Kries, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/09/818,918
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-55

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 57
US-09-776-479-1/c
; Sequence 1, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 54

; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-1

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 58
US-09-776-479-1/c
; Sequence 1, Application US/09776479
; Publication No. US20040067902A9
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-1

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 59
US-09-776-479-54/c
; Sequence 54, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 54

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```
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-54

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 60
US-09-776-479-54/c
; Sequence 54, Application US/09776479
; Publication No. US20040067902A9
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 54
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-54

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 61
US-09-776-479-55/c
; Sequence 55, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-55

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 62
US-09-776-479-55/c
; Sequence 55, Application US/09776479
; Publication No. US20040067902A9
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-55

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 63
US-09-776-479-91/c
; Sequence 91, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 91
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-91

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 ATGGCGCACGCTGGGAGA 18
 |||||
 DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 64

US-09-776-479-91/c
 ; Sequence 91, Application US/09776479
 ; Publication No. US20040067902A9
 ; GENERAL INFORMATION:
 ; APPLICANT: Bratzler, Robert L.
 ; APPLICANT: Petersen, Deanna M.
 ; APPLICANT: Fouron, Yves
 ; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
 ; TITLE OF INVENTION: Treatment of Asthma and Allergy
 ; FILE REFERENCE: C1037/7013 (HCL/MAT)
 ; CURRENT APPLICATION NUMBER: US/09/776,479
 ; CURRENT FILING DATE: 2001-02-02
 ; PRIOR APPLICATION NUMBER: US 60/179,991
 ; PRIOR FILING DATE: 2000-02-03
 ; NUMBER OF SEQ ID NOS: 1093
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 91
 ; LENGTH: 18
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic Sequence
 US-09-776-479-91

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 67;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
 |||||
 DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 65

US-09-954-987B-115/c
 ; Sequence 115, Application US/09954987B
 ; Publication No. US20030104523A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Stefan Bauer
 ; APPLICANT: Grayson B. Lipford
 ; APPLICANT: Hermann Wagner
 ; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
 ; TITLE OF INVENTION: CGG-BASED IMMUNO-AGONIST/ANTAGONIST
 ; FILE REFERENCE: C1041/7016 (AWS)
 ; CURRENT APPLICATION NUMBER: US/09/954,987B
 ; CURRENT FILING DATE: 2001-09-17
 ; PRIOR APPLICATION NUMBER: US 60/233,035
 ; PRIOR FILING DATE: 2000-09-15
 ; PRIOR APPLICATION NUMBER: US 60/263,657
 ; PRIOR FILING DATE: 2001-01-23
 ; PRIOR APPLICATION NUMBER: US 60/291,726
 ; PRIOR FILING DATE: 2001-05-17
 ; PRIOR APPLICATION NUMBER: US 60/300,210
 ; PRIOR FILING DATE: 2001-06-22
 ; NUMBER OF SEQ ID NOS: 230
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 115
 ; LENGTH: 18
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic oligonucleotide
 US-09-954-987B-115

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 67;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ATGGCGCACGCTGGGAGA 18
 |||||
 DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 66

US-09-895-480A-14/c
 ; Sequence 14, Application US/09895480A
 ; Publication No. US20030129221A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Inex Pharmaceuticals Inc.
 ; TITLE OF INVENTION: High Efficiency Encapsulation of Charged Therapeutic
 ; TITLE OF INVENTION: Lipid Vesicles
 ; NUMBER OF SEQUENCES: 17
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Oppedahl & Larson LLP
 ; STREET: PO Box 5068
 ; CITY: Dillon
 ; STATE: CO
 ; COUNTRY: US
 ; ZIP: 80435
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS 5.0
 ; SOFTWARE: Word Perfect
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/895,480A
 ; FILING DATE: 29-Jun-2001
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: <Unknown>
 ; FILING DATE: <Unknown>
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: <Unknown>
 ; REGISTRATION NUMBER: <Unknown>
 ; REFERENCE/DOCKET NUMBER: <Unknown>
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: <Unknown>
 ; TELEFAX: <Unknown>
 ; TELEX: <Unknown>
 ; INFORMATION FOR SEQ ID NO: 14:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 18
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: other nucleic acid
 ; HYPOTHETICAL: no
 ; ANTI-SENSE: yes
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 14:
 US-09-895-480A-14

Query Match 2.9%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 67;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
 |||||
 DB 18 ATGGCGCACGCTGGGAGA 1

RESULT 67

US-09-967-464-4/c
 ; Sequence 4, Application US/09967464
 ; Publication No. US20030138453A1
 ; GENERAL INFORMATION:
 ; APPLICANT: O'Hagan, Derek
 ; APPLICANT: Otten, Gillis
 ; APPLICANT: Donnelly, John J.


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; APPLICANT: Polo, John M.
; APPLICANT: Barnett, Susan
; APPLICANT: Singh, Manohan
; APPLICANT: Ulmer, Jeffrey
; APPLICANT: Dubensky, Jr., Thomas W.
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF HETEROLOGOUS NUCLEIC ACIDS
; FILE REFERENCE: PP16269.004
; CURRENT APPLICATION NUMBER: US/09/967,464
; CURRENT FILING DATE: 2002-04-11
; PRIOR APPLICATION NUMBER: 60/236,105
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: 60/315,905
; PRIOR FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 68
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificial sequence is synthesized
US-09-967-464-4

```

```

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1 ATGGCGCAGCTGGGAGA 18
      |||||
Db      18 ATGGCGCAGCTGGGAGA 1

```

```

RESULT 68
US-10-373-381-46/c
; Sequence 46, Application US/10373381
; Publication No. US20040030118A1
; GENERAL INFORMATION:
; APPLICANT: Wagner, Hermann
; APPLICANT: Lipford, Grayson
; TITLE OF INVENTION: Methods for Regulating Hematopoiesis
; TITLE OF INVENTION: Using CpG-Oligonucleotides
; FILE REFERENCE: C01041.70035.US
; CURRENT APPLICATION NUMBER: US/10/373,381
; CURRENT FILING DATE: 2003-02-24
; PRIOR APPLICATION NUMBER: US 09/241,653
; PRIOR FILING DATE: 1999-02-02
; PRIOR APPLICATION NUMBER: US 60/085,516
; PRIOR FILING DATE: 1998-05-14
; NUMBER OF SEQ ID NOS: 90
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 46
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-373-381-46

```

```

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1 ATGGCGCAGCTGGGAGA 18
      |||||
Db      18 ATGGCGCAGCTGGGAGA 1

```

```

RESULT 69
US-10-333-448-2/c
; Sequence 2, Application US/10333448
; Publication No. US20040049150A1
; GENERAL INFORMATION:
; APPLICANT: Dalton, Colin Clive

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; APPLICANT: Easeman, Richard Lewis
; APPLICANT: Garcon, Nathalie
; TITLE OF INVENTION: Vaccines
; FILE REFERENCE: B45229
; CURRENT APPLICATION NUMBER: US/10/333,448
; CURRENT FILING DATE: 2003-01-21
; PRIOR APPLICATION NUMBER: PCT/EP01/08339
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: GB 0017999.4
; PRIOR FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: CpG oligonucleotide
US-10-333-448-2

```

```

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1 ATGGCGCAGCTGGGAGA 18
      |||||
Db      18 ATGGCGCAGCTGGGAGA 1

```

```

RESULT 70
US-09-760-506-2/c
; Sequence 2, Application US/09760506
; Publication No. US2001003433CA1
; GENERAL INFORMATION:
; APPLICANT: Kensil, Charlotte
; TITLE OF INVENTION: Innate Immunity-Stimulating Compositions of CpG and
; FILE REFERENCE: 8449-153-999
; CURRENT APPLICATION NUMBER: US/09/760,506
; CURRENT FILING DATE: 2002-01-12
; PRIOR APPLICATION NUMBER: 60/200,853
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/175,840
; PRIOR FILING DATE: 2000-01-13
; PRIOR APPLICATION NUMBER: 60/128,608
; PRIOR FILING DATE: 1999-04-08
; PRIOR APPLICATION NUMBER: 60/095,913
; PRIOR FILING DATE: 1998-08-10
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Motif
US-09-760-506-2

```

```

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1 ATGGCGCAGCTGGGAGA 18
      |||||
Db      18 ATGGCGCAGCTGGGAGA 1

```

```

RESULT 71
US-10-314-578-1/c
; Sequence 1, Application US/10314578
; Publication No. US20030212026A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.

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```

; APPLICANT: Schetter, Christian
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/314,578
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 60/227,436
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-314-578-1

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 72
US-10-314-578-54/c
; Sequence 54, Application US/10314578
; Publication No. US20030212026A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/314,578
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 60/227,436
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 54
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-314-578-54

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 73
US-10-314-578-55/c
; Sequence 55, Application US/10314578
; Publication No. US20030212026A1
; GENERAL INFORMATION:

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; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schetter, Christian
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/314,578
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 60/227,436
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-314-578-55

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 74
US-10-314-578-91/c
; Sequence 91, Application US/10314578
; Publication No. US20030212026A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/314,578
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 60/227,436
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 91
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-314-578-91

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 75
US-10-434-696-51/c
; Sequence 51, Application US/10434696
; Publication No. US20030224010A1

```

GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Schorr, Joachim
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Use of Nucleic Acids Containing
; FILE REFERENCE: C1039/7058/HCL
; CURRENT APPLICATION NUMBER: US/10/434,696
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 09/325,193
; PRIOR FILING DATE: 1999-06-03
; PRIOR APPLICATION NUMBER: US 09/154,614
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: PCT/US98/04703
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: US 60/040,376
; PRIOR FILING DATE: 1997-03-10
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-434-696-51

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
| | | | | | | | | | | | | | | | | |
DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 76
US-10-023-909A-51/c
; Sequence 51, Application US/10023909A
; Publication No. US20020164341A1
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Schorr, Joachim
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Use of Nucleic Acids Containing
; FILE REFERENCE: C1039/7058/HCL
; CURRENT APPLICATION NUMBER: US/10/023,909A
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 09/325,193
; PRIOR FILING DATE: 1998-06-03
; PRIOR APPLICATION NUMBER: US 09/154,614
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: PCT/US98/04703
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: US 60/040,376
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-023-909A-51

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
| | | | | | | | | | | | | | | | | |
DB 18 ATGGCGCAGCTGGGAGA 1

Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 77
US-10-112-653-1/c
; Sequence 1, Application US/10112653
; Publication No. US20030050268A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; FILE REFERENCE: C01039/70060(AWS)
; CURRENT APPLICATION NUMBER: US/10/112,653
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-1

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
| | | | | | | | | | | | | | | | | |
DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 78
US-10-112-653-85/c
; Sequence 85, Application US/10112653
; Publication No. US20030050268A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; FILE REFERENCE: C01039/70060(AWS)
; CURRENT APPLICATION NUMBER: US/10/112,653
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 85
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-85

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
| | | | | | | | | | | | | | | | | |
DB 18 ATGGCGCAGCTGGGAGA 1

RESULT 79
US-10-017-995-1/c
; Sequence 1, Application US/10017995
; Publication No. US20030055014A1

```

; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-1

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 80
US-10-017-995-54/c
; Sequence 54, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 54
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-54

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 81
US-10-017-995-55/c
; Sequence 55, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55

```

```

; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-55

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 82
US-10-017-995-91/c
; Sequence 91, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 91
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-91

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 83
US-10-002-884A-6/c
; Sequence 6, Application US/10002884A
; Publication No. US20030087810A1
; GENERAL INFORMATION:
; APPLICANT: Stein, Cy A
; APPLICANT: Benimetskaya, Lyuba
; APPLICANT: Guzzo-Pernell, Nancy
; TITLE OF INVENTION: PEPTIDES THAT COMPLEX WITH ANTISENSE OLIGONUCLEOTIDES WHICH DOWNRE
; FILE REFERENCE: 0575/63293
; CURRENT APPLICATION NUMBER: US/10/002,884A
; CURRENT FILING DATE: 2001-11-02
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 18
; TYPE: DNA
; ORGANISM: ARTIFICIAL SEQUENCE
; FEATURE:
; OTHER INFORMATION: ANTISENSE OLIGONUCLEOTIDE
US-10-002-884A-6

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 84

US-10-300-247-51/c
; Sequence 51, Application US/10300247
; Publication No. US20030091599A1
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Schorr, Joachim
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Use of Nucleic Acids Containing
; FILE REFERENCE: C1039/7058/HCL
; CURRENT APPLICATION NUMBER: US/10/300,247
; PRIOR FILING DATE: 2002-11-20
; PRIOR APPLICATION NUMBER: US 09/325,193
; PRIOR FILING DATE: 1999-06-03
; PRIOR APPLICATION NUMBER: US 09/154,614
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: PCT/US98/04703
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: US 60/040,376
; PRIOR FILING DATE: 1997-03-10
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-300-247-51

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 85

US-10-161-229-53/c
; Sequence 53, Application US/10161229
; Publication No. US20030100527A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules for
; FILE REFERENCE: C01039/70061
; CURRENT APPLICATION NUMBER: US/10/161,229
; CURRENT FILING DATE: 2002-06-03
; PRIOR APPLICATION NUMBER: US 09/191,170
; PRIOR FILING DATE: 1998-11-13
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 53
; LENGTH: 18
; TYPE: DNA

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-161-229-53

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 86

US-10-142-566-45/c
; Sequence 45, Application US/10142566
; Publication No. US20030119016A1
; GENERAL INFORMATION:
; APPLICANT: Riley, Timothy A.
; APPLICANT: Brown, Bob D.
; APPLICANT: Arnold, Lyle J.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES WITH INCREASED RNASE SENSITIVITY
; FILE REFERENCE: OASBIO.003DV1
; CURRENT APPLICATION NUMBER: US/10/142,566
; CURRENT FILING DATE: 2002-08-06
; PRIOR APPLICATION NUMBER: US 09/136,080
; PRIOR FILING DATE: 1998-08-18
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-10-142-566-45

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 87

US-10-290-545-9/c
; Sequence 9, Application US/10290545
; Publication No. US20030125292A1
; GENERAL INFORMATION:
; APPLICANT: Semple, Sean
; APPLICANT: Klimuk, Sandy
; APPLICANT: Yuan, Zuan-Ning
; TITLE OF INVENTION: Improved Mucosal Vaccines and Methods for Using the Same
; FILE REFERENCE: A-71854/TAL/AXG
; CURRENT APPLICATION NUMBER: US/10/290,545
; CURRENT FILING DATE: 2002-11-07
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-290-545-9

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18

Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 88

US-10-290-545-24/c

; Sequence 24, Application US/10290545

; Publication No. US20030125292A1

; GENERAL INFORMATION:

; APPLICANT: Sample, Sean

; APPLICANT: Klimuk, Sandy

; APPLICANT: Yuan, Zuan-Ning

; TITLE OF INVENTION: Improved Mucosal Vaccines and Methods for Using the Same

; FILE REFERENCE: A-71854/TAL/AXG

; CURRENT APPLICATION NUMBER: US/10/290,545

; CURRENT FILING DATE: 2002-11-07

; NUMBER OF SEQ ID NOS: 30

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 24

; LENGTH: 18

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-290-545-24

Query Match 2.9%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 67;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18

Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 89

US-10-262-318-6/c

; Sequence 6, Application US/10262318

; Publication No. US20030144198A1

; GENERAL INFORMATION:

; APPLICANT: Copharos

; APPLICANT: Collins, Douglas A.

; TITLE OF INVENTION: ADMINISTRATION OF TRANSPORT PROTEINS WITH CONJUGATED COBALAMIN

; TITLE OF INVENTION: DELIVER AGENTS

; FILE REFERENCE: COP1012

; CURRENT APPLICATION NUMBER: US/10/262,318

; CURRENT FILING DATE: 2002-09-30

; NUMBER OF SEQ ID NOS: 14

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 6

; LENGTH: 18

; TYPE: DNA

; ORGANISM: artificial sequence

; FEATURE:

; OTHER INFORMATION: oligonucleotide-- G3139 Genta

US-10-262-318-6

Query Match 2.9%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 67;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18

Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 90

US-10-523-40/c

; Sequence 40, Application US/10224523

; Publication No. US20030148976A1

; GENERAL INFORMATION:

; APPLICANT: Krieg, Arthur

; APPLICANT: Vollmer, Jorg

; APPLICANT: Uhlmann, Eugen

; TITLE OF INVENTION: Combination Motif Immune Stimulatory Oligonucleotides with Improv

; TITLE OF INVENTION: Activity

; FILE REFERENCE: C01039/70063 (HCL/BWS)

; CURRENT APPLICATION NUMBER: US/10/224,523

; CURRENT FILING DATE: 2002-08-19

; PRIOR APPLICATION NUMBER: US 60/313,273

; PRIOR FILING DATE: 2001-08-17

; PRIOR APPLICATION NUMBER: US 60/393,952

; PRIOR FILING DATE: 2002-07-03

; NUMBER OF SEQ ID NOS: 81

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 40

; LENGTH: 18

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic Oligonucleotide

US-10-224-523-40

Query Match 2.9%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 67;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18

Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 91

US-10-379-164-2/c

; Sequence 2, Application US/10379164

; Publication No. US20030161834A1

; GENERAL INFORMATION:

; APPLICANT: Friede, Martin

; APPLICANT: Garcon, Nathalie

; APPLICANT: Gerard, Catherine Marie Ghislaine

; APPLICANT: Hermand, Philippe

; TITLE OF INVENTION: Vaccines

; FILE REFERENCE: B45181-ID1

; CURRENT APPLICATION NUMBER: US/10/379,164

; CURRENT FILING DATE: 2003-03-03

; PRIOR APPLICATION NUMBER: 09/690,921

; PRIOR FILING DATE: 2000-10-18

; PRIOR APPLICATION NUMBER: PCT/EP00/02920

; PRIOR FILING DATE: 2000-04-04

; PRIOR APPLICATION NUMBER: 09/301,829

; PRIOR FILING DATE: 1999-04-29

; PRIOR APPLICATION NUMBER: GB 9908885.8

; PRIOR FILING DATE: 1999-04-19

; NUMBER OF SEQ ID NOS: 5

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 2

; LENGTH: 18

; TYPE: DNA

; ORGANISM: Homo sapien

US-10-379-164-2

Query Match 2.9%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 67;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18

Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 92

US-10-187-264A-45/c

; Sequence 45, Application US/10187264A

; Publication No. US20030162734A1

; GENERAL INFORMATION:

; APPLICANT: Krieg, Arthur M.

; APPLICANT: Kleinman, Dennis

; APPLICANT: Steinberg, Alfred D.

; TITLE OF INVENTION: Methods for Treating and Preventing

```
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/187,264A
; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-187-264A-45

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 93
US-10-265-072-112/c
; Sequence 112, Application US/10265072
; Publication No. US20030166001A1
; GENERAL INFORMATION:
; APPLICANT: Lipford, Grayson
; TITLE OF INVENTION: TOLL-LIKE RECEPTOR 3 SIGNALING AGONISTS AND ANTAGONISTS
; FILE REFERENCE: C01041.70031.US
; CURRENT APPLICATION NUMBER: US/10/265,072
; CURRENT FILING DATE: 2002-10-05
; NUMBER OF SEQ ID NOS: 117
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 112
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-265-072-112

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 94
US-10-365-623-15/c
; Sequence 15, Application US/10365623
; Publication No. US20030166512A1
; GENERAL INFORMATION:
; APPLICANT: Xie, Dong
; TITLE OF INVENTION: Protein Carrier System for Therapeutic Oligonucleotides
; FILE REFERENCE: 63024.000001
; CURRENT APPLICATION NUMBER: US/10/365,623
; CURRENT FILING DATE: 2003-02-13
; NUMBER OF SEQ ID NOS: 23

; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/187,264A
; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-187-264A-45

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 95
US-10-142-666-9/c
; Sequence 9, Application US/10142666
; Publication No. US20030171315A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; TITLE OF INVENTION: OLIGONUCLEOTIDE PROBES AND PRIMERS
; TITLE OF INVENTION: COMPRISING UNIVERSAL BASES FOR THERAPEUTIC PURPOSES
; FILE REFERENCE: OASBIO.016A
; CURRENT APPLICATION NUMBER: US/10/142,666
; CURRENT FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: 60/306,229
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: 09/136,080
; PRIOR FILING DATE: 1998-08-18
; PRIOR APPLICATION NUMBER: 60/060,673
; PRIOR FILING DATE: 1997-10-02
; NUMBER OF SEQ ID NOS: 88
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificial Oligonucleotide
US-10-142-666-9

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 96
US-10-053-645A-17/c
; Sequence 17, Application US/10053645A
; Publication No. US20030176376A1
; GENERAL INFORMATION:
; APPLICANT: Robert E. Klem
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING A
; TITLE OF INVENTION: CELL-PROLIFERATIVE DISORDER USING CRE DECOY OLIGOMERS, BCL-2
; TITLE OF INVENTION: ANTISENSE OLIGOMERS, AND HYBRID OLIGOMERS THEREOF
; FILE REFERENCE: 10412-022-999
; CURRENT APPLICATION NUMBER: US/10/053,645A
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: 60/263,244
; PRIOR FILING DATE: 2001-01-22
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 18
```

```
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence: Synthetic Antisense
US-10-053-645A-17
; OTHER INFORMATION: Oligonucleotide

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 97
US-10-053-645A-24/c
; Sequence 24, Application US/10053645A
; Publication No. US20030176376A1
; GENERAL INFORMATION:
; APPLICANT: Robert E. Klem
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING A
; TITLE OF INVENTION: CELL-PROLIFERATIVE DISORDER USING CRE DECOY OLIGOMERS, BCL-2
; TITLE OF INVENTION: ANTISENSE OLIGOMERS, AND HYBRID OLIGOMERS THEREOF
; FILE REFERENCE: 10412-022-999
; CURRENT APPLICATION NUMBER: US/10/053,645A
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: 60/263,244
; PRIOR FILING DATE: 2001-01-22
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence: Synthetic Antisense
US-10-053-645A-24

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 98
US-10-140-013-1/c
; Sequence 1, Application US/10140013
; Publication No. US20030181406A1
; GENERAL INFORMATION:
; APPLICANT: Christian Schetter
; APPLICANT: Jorg Vollmer
; TITLE OF INVENTION: CPG-LIKE NUCLEIC ACIDS AND METHODS OF
; TITLE OF INVENTION: USE THEREOF
; FILE REFERENCE: C01041/70019 (AWS)
; CURRENT APPLICATION NUMBER: US/10/140,013
; CURRENT FILING DATE: 2002-05-06
; PRIOR APPLICATION NUMBER: US 60/254,341
; PRIOR FILING DATE: 2000-12-08
; PRIOR APPLICATION NUMBER: PCT/US01/48281
; PRIOR FILING DATE: 2001-12-10
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of artificial sequence: Synthetic Antisense
US-10-140-013-1/c
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; OTHER INFORMATION: Synthetic oligonucleotide
US-10-140-013-1

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 99
US-10-140-013-2/c
; Sequence 2, Application US/10140013
; Publication No. US20030181406A1
; GENERAL INFORMATION:
; APPLICANT: Christian Schetter
; APPLICANT: Jorg Vollmer
; TITLE OF INVENTION: CPG-LIKE NUCLEIC ACIDS AND METHODS OF
; TITLE OF INVENTION: USE THEREOF
; FILE REFERENCE: C01041/70019 (AWS)
; CURRENT APPLICATION NUMBER: US/10/140,013
; CURRENT FILING DATE: 2002-05-06
; PRIOR APPLICATION NUMBER: US 60/254,341
; PRIOR FILING DATE: 2000-12-08
; PRIOR APPLICATION NUMBER: PCT/US01/48281
; PRIOR FILING DATE: 2001-12-10
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-140-013-2/c

Query Match      2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred.No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCACGCTGGGAGA 1

RESULT 100
US-10-306-522-45/c
; Sequence 45, Application US/10306522
; Publication No. US20030191079A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
```



```

; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/306,522
; CURRENT FILING DATE: 2002-11-27
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-306-522-45

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Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 ATGGCGCACGCTGGGAGA 18
    |||||
DB 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 101
US-10-233-902-6/c
; Sequence 6, Application US/10233902
; Publication No. US20030194391A1
; GENERAL INFORMATION:
; APPLICANT: Claire Ashman
; APPLICANT: James Scott Crowe
; APPLICANT: Jonathan Henry Ellis
; APPLICANT: Alan Peter Lewis
; TITLE OF INVENTION: VACCINE
; FILE REFERENCE: PG4355US
; CURRENT APPLICATION NUMBER: US/10/233,902
; CURRENT FILING DATE: 2002-09-03
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 18
; TYPE: DNA
; ORGANISM: unknown
; FEATURE:
; OTHER INFORMATION: synthetic immunostimulatory oligonucleotide
US-10-233-902-6

```

```

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 ATGGCGCACGCTGGGAGA 18
    |||||
DB 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 102
US-10-437-263-9/c
; Sequence 9, Application US/10437263
; Publication No. US20040009943A1
; GENERAL INFORMATION:

```

```

; APPLICANT: Semple, Sean
; APPLICANT: Tam, Ying K.
; APPLICANT: Chikh, Ghania
; APPLICANT: Hope, Michael J.
; TITLE OF INVENTION: PATHOGEN VACCINES AND METHODS FOR USING THE SAME
; FILE REFERENCE: A-72216/TAL
; CURRENT APPLICATION NUMBER: US/10/437,263
; CURRENT FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,343
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/460,646
; PRIOR FILING DATE: 2003-04-04
; PRIOR APPLICATION NUMBER: 60/454,298
; PRIOR FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-437-263-9

```

```

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 ATGGCGCACGCTGGGAGA 18
    |||||
DB 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 103
US-10-437-263-24/c
; Sequence 24, Application US/10437263
; Publication No. US20040009943A1
; GENERAL INFORMATION:
; APPLICANT: Semple, Sean
; APPLICANT: Tam, Ying K.
; APPLICANT: Chikh, Ghania
; APPLICANT: Hope, Michael J.
; TITLE OF INVENTION: PATHOGEN VACCINES AND METHODS FOR USING THE SAME
; FILE REFERENCE: A-72216/TAL
; CURRENT APPLICATION NUMBER: US/10/437,263
; CURRENT FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,343
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/460,646
; PRIOR FILING DATE: 2003-04-04
; PRIOR APPLICATION NUMBER: 60/454,298
; PRIOR FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 24
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-437-263-24

```

```

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 ATGGCGCACGCTGGGAGA 18
    |||||
DB 18 ATGGCGCACGCTGGGAGA 1

```

```

RESULT 104
US-10-437-275-9/c
; Sequence 9, Application US/10437275
; Publication No. US20040009944A1
; GENERAL INFORMATION:
; APPLICANT: Tam, Ying K.

```

; APPLICANT: Semple, Sean
; APPLICANT: Klimuk, Sandra
; APPLICANT: Chikh, Ghania
; TITLE OF INVENTION: METHYLATED IMMUNOSTIMULATORY OLIGONUCLEOTIDES AND METHODS OF
; TITLE OF INVENTION: USING THE SAME
; FILE REFERENCE: A-72158/TAL
; CURRENT APPLICATION NUMBER: US/10/437,275
; PRIOR FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,343
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/460,646
; PRIOR FILING DATE: 2003-04-04
; PRIOR APPLICATION NUMBER: 10/290,545
; PRIOR FILING DATE: 2002-11-07
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-437-275-9

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 105
US-10-437-275-24/c
; Sequence 24, Application US/10437275
; Publication No. US20040009944A1
; GENERAL INFORMATION:
; APPLICANT: Semple, Sean
; APPLICANT: Klimuk, Sandra
; APPLICANT: Chikh, Ghania
; TITLE OF INVENTION: METHYLATED IMMUNOSTIMULATORY OLIGONUCLEOTIDES AND METHODS OF
; TITLE OF INVENTION: USING THE SAME
; FILE REFERENCE: A-72158/TAL
; CURRENT APPLICATION NUMBER: US/10/437,275
; CURRENT FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,343
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/460,646
; PRIOR FILING DATE: 2003-04-04
; PRIOR APPLICATION NUMBER: 10/290,545
; PRIOR FILING DATE: 2002-11-07
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 24
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-437-275-24

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 106
US-10-447-136-218/c
; Sequence 218, Application US/10447136
; Publication No. US20040009948A1
; GENERAL INFORMATION:

; APPLICANT: WRIGHT, Jim A.
; APPLICANT: YOUNG, Aiping H.
; TITLE OF INVENTION: Antitumor Antisense Sequences Directed Against R1 and
; TITLE OF INVENTION: R2 Components of Ribonucleotide Reductase
; FILE REFERENCE: 032396-023
; CURRENT APPLICATION NUMBER: US/10/447,136
; CURRENT FILING DATE: 2003-05-29
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/249,247
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-02-11
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/023,040
; PRIOR FILING DATE: EARLIER FILING DATE: 1996-08-02
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/039,959
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 08/904,901
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-01
; NUMBER OF SEQ ID NOS: 220
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 218
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Human
US-10-447-136-218

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 107
US-10-437-258-9/c
; Sequence 9, Application US/10437258
; Publication No. US20040013649A1
; GENERAL INFORMATION:
; APPLICANT: Semple, Sean
; APPLICANT: Klimuk, Sandra
; APPLICANT: Chikh, Ghania
; TITLE OF INVENTION: CANCER VACCINES AND METHODS OF USING THE SAME
; FILE REFERENCE: A-72252/TAL
; CURRENT APPLICATION NUMBER: US/10/437,258
; CURRENT FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,343
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/460,646
; PRIOR FILING DATE: 2003-04-04
; PRIOR APPLICATION NUMBER: 60/454,298
; PRIOR FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-437-258-9

Query Match 2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 108
US-10-437-258-24/c
; Sequence 24, Application US/10437258
; Publication No. US20040013649A1
; GENERAL INFORMATION:

```
; APPLICANT: Tam, Ying K.
; APPLICANT: Semple, Sean
; APPLICANT: Klimuk, Sandra
; APPLICANT: Chikh, Ghania
; TITLE OF INVENTION: CANCER VACCINES AND METHODS OF USING THE SAME
; FILE REFERENCE: A-72252/TAL
; CURRENT APPLICATION NUMBER: US/10/437,258
; CURRENT FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,343
; PRIOR FILING DATE: 2002-05-10
; PRIOR APPLICATION NUMBER: 60/460,646
; PRIOR FILING DATE: 2003-04-04
; PRIOR APPLICATION NUMBER: 60/454,298
; PRIOR FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 24
; TYPE: DNA
; ORGANISM: Homo sapiens
; ORGANISM: Homo sapiens
US-10-437-258-24

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
   |||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 109
US-10-719-493-45/c
; Sequence 45, Application US/10719493
; Publication No. US20040087538A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Methods of Treating Cancer Using
; FILE REFERENCE: C1039/7021/HCL
; CURRENT APPLICATION NUMBER: US/10/719,493
; CURRENT FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-719-493-45

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
   |||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 110
US-10-627-331-45/c
; Sequence 45, Application US/10627331
; Publication No. US20040106568A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/627,331
; CURRENT FILING DATE: 2003-07-25
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-627-331-45

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
   |||||
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 111
US-10-666-733-51/c
; Sequence 51, Application US/10666733
; Publication No. US20040131628A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Treatment of
; TITLE OF INVENTION: Disorders Associated with Microorganisms
; FILE REFERENCE: C1037.70018US00
; CURRENT APPLICATION NUMBER: US/10/666,733
; CURRENT FILING DATE: 2003-09-19
; PRIOR APPLICATION NUMBER: not yet assigned
; PRIOR FILING DATE: 2003-09-19
; PRIOR APPLICATION NUMBER: US 09/801,839
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: US 60/187,834
; PRIOR FILING DATE: 2000-03-08
; NUMBER OF SEQ ID NOS: 135
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-666-733-51

Query Match          2.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
   |||||
Db 18 ATGGCGCAGCTGGGAGA 1
```


; GENERAL INFORMATION:
 ; APPLICANT: Kazuaki TAIRA
 ; APPLICANT: Masashi WARASHINA
 ; APPLICANT: Tomoko WARASHINA
 ; TITLE OF INVENTION: Nucleic acid enzymes acquiring an activity for cleaving a
 ; FILE OF INVENTION: target RNA by recognizing another molecule
 ; FILE REFERENCE:
 ; CURRENT APPLICATION NUMBER: US/09/974,974
 ; CURRENT FILING DATE: 2002-03-14
 ; PRIOR APPLICATION NUMBER: JP 2000-313320
 ; PRIOR FILING DATE: 2000-10-13
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 13
 ; LENGTH: 19
 ; TYPE: RNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: part of bcl-2 mRNA as
 ; OTHER INFORMATION: a substrate
 US-09-974-974-13

Query Match 2.9%; Score 18; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 70;
 Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 190 GACCGGTCGCCAGGACC 207
 |||||
 Db 2 GACCGGTCGCCAGGACC 19

RESULT 117
 US-09-888-326-757/c
 ; Sequence 757, Application US/09888326
 ; Publication No. US20030026801A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Weiner, George
 ; APPLICANT: Hartmann, Gunther
 ; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
 ; FILE OF INVENTION: Cell Lysis and Treating Cancer
 ; FILE REFERENCE: C1039/7052 (AWS)
 ; CURRENT APPLICATION NUMBER: US/09/888,326
 ; CURRENT FILING DATE: 2001-06-22
 ; PRIOR APPLICATION NUMBER: US 60/213,346
 ; PRIOR FILING DATE: 2000-06-22
 ; NUMBER OF SEQ ID NOS: 848
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 757
 ; LENGTH: 20
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic oligonucleotide
 ; NAME/KEY: misc feature
 ; LOCATION: (0)..(0)
 ; OTHER INFORMATION: chimeric phosphorothioate/phosphodiester backbone
 ; OTHER INFORMATION: with phosphorothioate at 5' and 3' ends
 US-09-888-326-757

Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
 |||||
 Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 118
 US-09-776-479-87/c
 ; Sequence 87, Application US/09776479
 ; Publication No. US20030087848A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Krieger, Arthur M.
 ; APPLICANT: Schetter, Christian
 ; APPLICANT: Vollmer, Jorg
 ; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
 ; FILE REFERENCE: C1039/7035 (HCL/MAT)

; APPLICANT: Bratzler, Robert L.
 ; APPLICANT: Petersen, Deanna M.
 ; APPLICANT: Fouron, Yves
 ; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
 ; FILE OF INVENTION: Treatment of Asthma and Allergy
 ; FILE REFERENCE: C1037/7013 (HCL/MAT)
 ; CURRENT APPLICATION NUMBER: US/09/776,479
 ; CURRENT FILING DATE: 2001-02-02
 ; PRIOR APPLICATION NUMBER: US 60/179,991
 ; PRIOR FILING DATE: 2000-02-03
 ; NUMBER OF SEQ ID NOS: 1093
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 87
 ; LENGTH: 20
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic Sequence
 ; OTHER INFORMATION: Synthetic Sequence
 US-09-776-479-87

Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
 |||||
 Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 119
 US-09-776-479-87/c
 ; Sequence 87, Application US/09776479
 ; Publication No. US20040067902A9
 ; GENERAL INFORMATION:
 ; APPLICANT: Bratzler, Robert L.
 ; APPLICANT: Petersen, Deanna M.
 ; APPLICANT: Fouron, Yves
 ; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
 ; FILE OF INVENTION: Treatment of Asthma and Allergy
 ; FILE REFERENCE: C1037/7013 (HCL/MAT)
 ; CURRENT APPLICATION NUMBER: US/09/776,479
 ; CURRENT FILING DATE: 2001-02-02
 ; PRIOR APPLICATION NUMBER: US 60/179,991
 ; PRIOR FILING DATE: 2000-02-03
 ; NUMBER OF SEQ ID NOS: 1093
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 87
 ; LENGTH: 20
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic Sequence
 ; OTHER INFORMATION: Synthetic Sequence
 US-09-776-479-87

Query Match 2.9%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGGCGCACGCTGGGAGA 18
 |||||
 Db 18 ATGGCGCACGCTGGGAGA 1

RESULT 120
 US-10-314-578-87/c
 ; Sequence 87, Application US/10314578
 ; Publication No. US20030212026A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Krieger, Arthur M.
 ; APPLICANT: Schetter, Christian
 ; APPLICANT: Vollmer, Jorg
 ; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
 ; FILE REFERENCE: C1039/7035 (HCL/MAT)

```

; CURRENT APPLICATION NUMBER: US/10/314,578
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 60/227,436
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 87
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-314-578-87

```

```

Query Match      2.9%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 ATGGCGCACGCTGGGAGA 18
          |||||
Db      18 ATGGCGCACGCTGGGAGA 1

```

RESULT 121

```

US-10-112-653-81/c
; Sequence 81, Application US/10112653
; Publication No. US20030050268A1
; GENERAL INFORMATION:
; APPLICANT: Kries, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; TITLE OF INVENTION: TREATMENT OF NON-ALLERGIC INFLAMMATORY DISEASES
; FILE REFERENCE: C01039/70060(AWS)
; CURRENT APPLICATION NUMBER: US/10/112,653
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 81
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-81

```

```

Query Match      2.9%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 ATGGCGCACGCTGGGAGA 18
          |||||
Db      18 ATGGCGCACGCTGGGAGA 1

```

RESULT 122

```

US-10-017-995-87/c
; Sequence 87, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093

```

```

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 87
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-87

```

```

Query Match      2.9%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 ATGGCGCACGCTGGGAGA 18
          |||||
Db      18 ATGGCGCACGCTGGGAGA 1

```

RESULT 123

```

US-10-016-490C-3
; Sequence 3, Application US/10016490C
; Publication No. US20040072769A1
; GENERAL INFORMATION:
; APPLICANT: Yin, James Q.
; TITLE OF INVENTION: Methods for design and selection of short double-stranded
; TITLE OF INVENTION: oligonucleotides, and compounds of gene drugs
; FILE REFERENCE: 01-2793
; CURRENT APPLICATION NUMBER: US/10/016,490C
; CURRENT FILING DATE: 2002-11-22
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 3
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: The same as those in human.
US-10-016-490C-3

```

```

Query Match      2.8%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      187 CGGACCCCGTCCGAGGA 205
          |||||
Db      1 CGGACCCCGTCCGAGGA 19

```

RESULT 124

```

US-10-251-117-194/c
; Sequence 194, Application US/10251117
; Publication No. US20030170891A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Epidermal Growth Factor Receptor
; TITLE OF INVENTION: Gene Expression Using Short Interfering RNA
; FILE REFERENCE: 900/042 (MEHB02-468-A)
; CURRENT APPLICATION NUMBER: US/10/251,117
; CURRENT FILING DATE: 2003-02-24
; PRIOR APPLICATION NUMBER: US 60/393,924
; PRIOR FILING DATE: 2002-07-03
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 09/916,466
; PRIOR FILING DATE: 2001-07-25
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; NUMBER OF SEQ ID NOS: 1213
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 194

```

```
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target sequence/siNA sense r
US-10-251-117-194

Query Match          2.8%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 462 TGGGTCATGCTGTGGAG 480
Db 19 TGGGTCATGCTGTGGAG 1

RESULT 125
US-10-251-117-443
; Sequence 443, Application US/10251117
; Publication No. US20030170891A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Epidermal Growth Factor R
; TITLE OF INVENTION: Gene Expression Using Short Interfering RNA
; FILE REFERENCE: 900/042 (WEH02-468-A)
; CURRENT APPLICATION NUMBER: US/10/251,117
; CURRENT FILING DATE: 2003-02-24
; PRIOR APPLICATION NUMBER: US 60/393,924
; PRIOR FILING DATE: 2002-07-03
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 09/916,466
; PRIOR FILING DATE: 2001-07-25
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; NUMBER OF SEQ ID NOS: 1213
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 443
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-251-117-443

Query Match          2.8%; Score 17.4; DB 1; Length 19;
Best Local Similarity 68.4%; Pred. No. 79;
Matches 13; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 462 TGGGTCATGCTGTGGAG 480
Db 1 UGGGUGCAUGUGUGGGAG 19

RESULT 126
US-10-714-310-17
; Sequence 17, Application US/10714310
; Publication No. US20040152854A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
```

```
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 17
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-17

Query Match          2.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 367 CCCTTCACCGCGGGG 383
Db 1 CCCTTCACCGCGGGG 17

RESULT 127
US-09-824-468-72/c
; Sequence 72, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 72
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-72

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
Db 18 ATGGCGCGCGCTGGGAGA 1

RESULT 128
US-09-888-326-750/c
; Sequence 750, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AMS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 750
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
```

```

; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-750

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
   ||||| ||||| ||||| |||||
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 129
US-09-888-326-751/c
; Sequence 751, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 751
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-751

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
   ||||| ||||| ||||| |||||
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 130
US-09-888-326-753/c
; Sequence 753, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 753
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Synthetic oligonucleotide
; LOCATION: (0)...(0)

; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-753

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
   ||||| ||||| ||||| |||||
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 131
US-09-931-583-69/c
; Sequence 69, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Kries, Arthur
; APPLICANT: Kliman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053 (HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 69
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-931-583-69

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
   ||||| ||||| ||||| |||||
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 132
US-09-776-479-78/c
; Sequence 78, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 78
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-78

```


Query Match
Best Local Similarity 2.7%; Score 16.4; DB 1; Length 18;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
18 ATGGCGCTCGCTGGGAGA 1

Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 133
US-09-776-479-78/c
; Sequence 78, Application US/09776479
; Publication No. US20040067902A9
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 78
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-78

Query Match
Best Local Similarity 2.7%; Score 16.4; DB 1; Length 18;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
18 ATGGCGCTCGCTGGGAGA 1

Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 134
US-09-776-479-79/c
; Sequence 79, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 79
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-79

Query Match
Best Local Similarity 2.7%; Score 16.4; DB 1; Length 18;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
18 ATGGCGCTCGCTGGGAGA 1

Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 135
US-09-776-479-79/c
; Sequence 79, Application US/09776479
; Publication No. US20040067902A9
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 79
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-79

Query Match
Best Local Similarity 2.7%; Score 16.4; DB 1; Length 18;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
18 ATGGCGCTCGCTGGGAGA 1

Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 136
US-09-776-479-406/c
; Sequence 406, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 406
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-406

Query Match
Best Local Similarity 2.7%; Score 16.4; DB 1; Length 18;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
18 ATGGCGTACGCTGGGAGA 1

Db 18 ATGGCGTACGCTGGGAGA 1

RESULT 137
US-09-776-479-406/c
; Sequence 406, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 406
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-406

Query Match
Best Local Similarity 2.7%; Score 16.4; DB 1; Length 18;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCACGCTGGGAGA 18
18 ATGGCGTACGCTGGGAGA 1

Db 18 ATGGCGTACGCTGGGAGA 1


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US-10-314-578-78/c
; Sequence 78, Application US/10314578
; Publication No. US20030212026A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schetter, Christian
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/314,578
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 60/227,436
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 78
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-314-578-78

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
   ||||| ||||| |||||
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 142
US-10-314-578-79/c
; Sequence 79, Application US/10314578
; Publication No. US20030212026A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schetter, Christian
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/314,578
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 79
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-314-578-79

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
   ||||| ||||| |||||
Db 18 ATGGCGCGCTCGCTGGGAGA 1

RESULT 143
US-10-314-578-406/c
; Sequence 406, Application US/10314578
; Publication No. US20030212026A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schetter, Christian
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/314,578
; CURRENT FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 60/227,436
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 406
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-314-578-406

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
   ||||| ||||| |||||
Db 18 ATGGCGTACGCTGGGAGA 1

RESULT 144
US-10-112-653-72/c
; Sequence 72, Application US/10112653
; Publication No. US20030050268A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; TREATMENT OF NON-ALLERGIC INFLAMMATORY DISEASES
; FILE REFERENCE: C01039/70060(AWS)
; CURRENT APPLICATION NUMBER: US/10/112,653
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 72
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-72

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGGCGCAGCTGGGAGA 18
   ||||| ||||| |||||
Db 18 ATGGCGCTCGCTGGGAGA 1

RESULT 145
US-10-112-653-73/c
; Sequence 73, Application US/10112653

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```

; Publication No. US20030050268A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; TITLE OF INVENTION: TREATMENT OF NON-ALLERGIC INFLAMMATORY DISEASES
; FILE REFERENCE: C01039/70060(AWS)
; CURRENT APPLICATION NUMBER: US/10/112,653
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 73
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-73

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCGCTGGGAGA 1

RESULT 146
US-10-112-653-393/c
; Sequence 393, Application US/10112653
; Publication No. US20030050268A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; TITLE OF INVENTION: TREATMENT OF NON-ALLERGIC INFLAMMATORY DISEASES
; FILE REFERENCE: C01039/70060(AWS)
; CURRENT APPLICATION NUMBER: US/10/112,653
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 393
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-393

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGTACGCTGGGAGA 1

RESULT 147
US-10-017-995-78/c
; Sequence 78, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 406
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-406

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; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 78
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-78

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCTCGCTGGGAGA 1

RESULT 148
US-10-017-995-79/c
; Sequence 79, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 79
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-79

Query Match      2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 ATGGCGCACGCTGGGAGA 18
Db      18 ATGGCGCGCGCTGGGAGA 1

RESULT 149
US-10-017-995-406/c
; Sequence 406, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 406
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-406

```

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 150
US-10-161-229-66/c
; Sequence 66, Application US/10161229
; Publication No. US20030100527A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules for
; TITLE OF INVENTION: Activating Dendritic Cells
; FILE REFERENCE: C01039/70061
; CURRENT APPLICATION NUMBER: US/10/161,229
; CURRENT FILING DATE: 2002-06-03
; PRIOR APPLICATION NUMBER: US 09/191,170
; PRIOR FILING DATE: 1998-11-13
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 66
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-161-229-66

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 151
US-10-187-264A-72/c
; Sequence 72, Application US/1018264A
; Publication No. US20030162734A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039,70062 US
; CURRENT APPLICATION NUMBER: US/10/187,264A
; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358

; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 72
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-187-264A-72

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 152
US-10-265-072-110/c
; Sequence 110, Application US/10265072
; Publication No. US20030166001A1
; GENERAL INFORMATION:
; APPLICANT: Lipford, Grayson
; TITLE OF INVENTION: TOLL-LIKE RECEPTOR 3 SIGNALING AGONISTS AND ANTAGONISTS
; FILE REFERENCE: C01041,70031 US
; CURRENT APPLICATION NUMBER: US/10/265,072
; CURRENT FILING DATE: 2002-10-05
; NUMBER OF SEQ ID NOS: 117
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 110
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-265-072-110

Query Match 2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGGCGCAGCTGGGAGA 18
Db 18 ATGGCGCAGCTGGGAGA 1

RESULT 153
US-10-306-522-72/c
; Sequence 72, Application US/10306522
; Publication No. US20030191079A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039,70062 US
; CURRENT APPLICATION NUMBER: US/10/306,522
; CURRENT FILING DATE: 2002-11-27
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124

```

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 72
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-306-522-72

```

```

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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```

QY 1 ATGGCGCACGCTGGGAGA 18
   ||||| ||||| |||||
DB 18 ATGGCGCGCTGGGAGA 1

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RESULT 154

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US-10-719-493-72/c
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; Sequence 72, Application US/10719493
; Publication No. US20040087538A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Methods of Treating Cancer Using
; FILE REFERENCE: C1039/7021/HCL
; CURRENT APPLICATION NUMBER: US/10/719,493
; PRIOR FILING DATE: 2003-11-21
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/385,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 72
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-719-493-72

```

```

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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```

QY 1 ATGGCGCACGCTGGGAGA 18
   ||||| ||||| |||||
DB 18 ATGGCGCGCTGGGAGA 1

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RESULT 155

```
US-10-627-331-72/c
```

```

; Sequence 72, Application US/10627331
; Publication No. US20040106568A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; FILE REFERENCE: C01039,70062,US
; CURRENT APPLICATION NUMBER: US/10/627,331
; PRIOR FILING DATE: 2003-07-25
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30

```

```

; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 72
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-627-331-72

```

```

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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```

QY 1 ATGGCGCACGCTGGGAGA 18
   ||||| ||||| |||||
DB 18 ATGGCGCGCTGGGAGA 1

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RESULT 156

```
US-10-735-592-53/c
```

```

; Sequence 53, Application US/10735592
; Publication No. US20040171571A1
; GENERAL INFORMATION:
; APPLICANT: Art, Krieg
; APPLICANT: Joerg, Vollmer
; TITLE OF INVENTION: 5' CPG Nucleic Acids and Methods of Use
; FILE REFERENCE: C1037,70038US01
; CURRENT APPLICATION NUMBER: US/10/735,592
; PRIOR FILING DATE: 2003-12-11
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 53
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-735-592-53

```

```

Query Match          2.7%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 1 ATGGCGCACGCTGGGAGA 18
   ||||| ||||| |||||
DB 18 ATGGCGCACGCTGGGCGA 1

```

RESULT 157

```
US-09-740-332-129
```

```

; Sequence 129, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; PRIOR FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 129
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:

```

```
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-129

Query Match      2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.1e+02;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 247 GGGCTGGCTCAGCCG 263
DB 1 GGGCCUGGGCUCAGCCC 17

RESULT 158
US-09-740-332-4426/c
; Sequence 4426, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740.332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4426
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-4426

Query Match      2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 248 GGCCTGGCTCAGCCG 264
DB 17 GGCCTGGCTCAGCCG 1

RESULT 159
US-09-817-879-129
; Sequence 129, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 129
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-129

Query Match      2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.1e+02;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 247 GGGCTGGCTCAGCCG 263
DB 1 GGGCCUGGGCUCAGCCC 17

RESULT 160
US-09-817-879-4426/c
; Sequence 4426, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4426
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-4426

Query Match      2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 248 GGCCTGGCTCAGCCG 264
DB 17 GGCCTGGCTCAGCCG 1

RESULT 161
US-10-163-552-807/c
; Sequence 807, Application US/10163552
; Publication No. US20030105051A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: MCSwiggan, Jim
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to level 1
; FILE REFERENCE: MHB01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 807
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; OTHER INFORMATION:
US-10-163-552-807

Query Match      2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 464 GGGTCATGTGTGGGAG 480
DB 17 GGGTCATGTGTGGGAG 1

RESULT 162
US-10-163-552-808/c
; Sequence 808, Application US/10163552
; Publication No. US20030105051A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: MCSwiggan, Jim
```

```
QY 247 GGGCTGGCTCAGCCG 263
DB 1 GGGCCUGGGCUCAGCCC 17

RESULT 160
US-09-817-879-4426/c
; Sequence 4426, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: MHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4426
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-4426

Query Match      2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 248 GGCCTGGCTCAGCCG 264
DB 17 GGCCTGGCTCAGCCG 1

RESULT 161
US-10-163-552-807/c
; Sequence 807, Application US/10163552
; Publication No. US20030105051A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: MCSwiggan, Jim
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to level 1
; FILE REFERENCE: MHB01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 807
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; OTHER INFORMATION:
US-10-163-552-807

Query Match      2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 464 GGGTCATGTGTGGGAG 480
DB 17 GGGTCATGTGTGGGAG 1

RESULT 162
US-10-163-552-808/c
; Sequence 808, Application US/10163552
; Publication No. US20030105051A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: MCSwiggan, Jim
```

; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to level
; TITLE OF INVENTION: HER2
; FILE REFERENCE: MBHB01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 808
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-163-552-808

Query Match 2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 462 TGGGGTCATGTCGTGG 478
DB 17 TGGGGTCATGTCGTGGG 1

RESULT 163
US-10-138-674-3243/c
; Sequence 3243, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor
; FILE REFERENCE: MBHB00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/138,674
; CURRENT FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3243
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Mus musculus
US-10-138-674-3243

Query Match 2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 563 GGATCCAGGATAACGGA 579
DB 17 GGATCCAGGATAAAGGA 1

RESULT 164
US-10-287-949A-3243/c
; Sequence 3243, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor
; FILE REFERENCE: MBHB00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/287,949A
; CURRENT FILING DATE: 2003-04-11
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3243
; LENGTH: 17

; TYPE: RNA
; ORGANISM: Mus musculus
US-10-287-949A-3243

Query Match 2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 563 GGATCCAGGATAACGGA 579
DB 17 GGATCCAGGATAAAGGA 1

RESULT 165
US-10-669-841-2722
; Sequence 2722, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patricia, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPAT
; TITLE OF INVENTION: VIRUS REPLICATION
; FILE REFERENCE: 400/042US (MEHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-03-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2722
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-2722

Query Match 2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.1e+02;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 247 GGGCGCTGGCTCAGCCC 263


```

Db      1 GGGCCUGGGUCUAGCCC 17

RESULT 166
US-10-669-841-7019/c
; Sequence 7019, Application US/10669841
; Publication No. US20040127448A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Maceljak
; APPLICANT: James, McSwigen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Favco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: Oligonucleotide mediated inhibition of hepatitis B virus and HEPA
; FILE REFERENCE: 400/042US (WBH802-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-03-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7019
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-7019

Query Match      2.5%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      248 GGCCTGGCTCAGCCCG 264
Db      17 GGCCTGGCTCAGCCCG 1

RESULT 167
US-09-932-129-2
; Sequence 2, Application US/09932129
; Patent No. US20020119533A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; TITLE OF INVENTION: Amplification primer pairs and use

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; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: OASBIO.002C1
; CURRENT APPLICATION NUMBER: US/09/932,129
; PRIOR FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: PCT/US00/09230
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: US 60/128,378
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide primers
US-09-932-129-2

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      267 GCCACCTGTGGTCC 280
Db      1 GCCACCTGTGGTCC 14

RESULT 168
US-10-621-009-2
; Sequence 2, Application US/10621009
; Publication No. US20040014129A1
; GENERAL INFORMATION:
; APPLICANT: Brown, Bob D.
; TITLE OF INVENTION: Amplification primer pairs and use
; FILE REFERENCE: OASBIO.002C2
; CURRENT APPLICATION NUMBER: US/10/621,009
; CURRENT FILING DATE: 2003-07-15
; PRIOR APPLICATION NUMBER: US 09/932,129
; PRIOR FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: PCT/US00/09230
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: US 60/128,378
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide primers
US-10-621-009-2

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      267 GCCACCTGTGGTCC 280
Db      1 GCCACCTGTGGTCC 14

RESULT 169
US-10-714-310-8/c
; Sequence 8, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhigong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Kohn, Richard
; TITLE OF INVENTION: Inhibitory oligonucleotides targeted to Bcl-2

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; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-8

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred.No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      303 CGACGACTTCTCC 316
DB      14 CGACGACTTCTCC 1

RESULT 170
US-10-714-310-9/c
; Sequence 9, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-9

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred.No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      288 CCTCGGCCAAGCCG 301
DB      14 CCTCGGCCAAGCCG 1

RESULT 171
US-10-714-310-10/c
; Sequence 10, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 10
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-10

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred.No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      367 CCTTCACCGCGCG 380
DB      14 CCTTCACCGCGCG 1

RESULT 172
US-10-714-310-11/c
; Sequence 11, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 11
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-11

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred.No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      368 CCTTCACCGCGCG 381
DB      14 CCTTCACCGCGCG 1

RESULT 173
US-10-714-310-12/c
; Sequence 12, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 12
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-12

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred.No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      367 CCTTCACCGCGCG 380
DB      14 CCTTCACCGCGCG 1

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Db      14 CCCTTACCGCGCG 1
|||||
RESULT 174
US-10-714-310-16
; Sequence 16, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; PRIOR FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 16
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-16

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      303 CGAGGACTTCTCCC 316
|||||
Db      1 CGAGGACTTCTCCC 14
|||||

RESULT 175
US-10-714-310-25/c
; Sequence 25, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; PRIOR FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 25
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-25

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      9 CGCTGGGAGAACGG 22
|||||
Db      14 CGCTGGGAGAACGG 1
|||||

RESULT 176
US-10-714-310-26/c
; Sequence 26, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:

```

```

; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; PRIOR FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 26
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-26

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      314 CCGCGCGCTACCGC 327
|||||
Db      14 CCGCGCGCTACCGC 1
|||||

RESULT 177
US-10-714-310-27/c
; Sequence 27, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; PRIOR FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 27
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-27

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      318 CCGTACCGCGCGC 331
|||||
Db      14 CCGTACCGCGCGC 1
|||||

RESULT 178
US-10-714-310-28/c
; Sequence 28, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; PRIOR FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269

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; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 28
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-28

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      335 TCGCGGAGATGTC 348
DB      14 TCGCGGAGATGTC 1

RESULT 179
US-10-714-310-33/c
; Sequence 33, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Rufner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 33
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-33

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      369 CTTACCGCGCGG 382
DB      14 CTTACCGCGCGG 1

RESULT 180
US-10-714-310-34/c
; Sequence 34, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Rufner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 34
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-34

Query Match      2.3%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      372 CACCGCGCGGGAC 385
DB      14 CACCGCGCGGGAC 1

RESULT 181
US-10-343-859-29/c
; Sequence 29, Application US/10343859
; Publication No. US20040110161A1
; GENERAL INFORMATION:
; APPLICANT: Nanogen Recgnomics GMBH
; TITLE OF INVENTION: Method for detecting mutations in
; FILE REFERENCE: 612,406-033
; CURRENT APPLICATION NUMBER: US/10/343,859
; CURRENT FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/EP01/08127
; PRIOR FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: 10038237.1
; PRIOR FILING DATE: 2000-08-04
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 29
; LENGTH: 39
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-343-859-29

Query Match      2.2%; Score 13.4; DB 1; Length 39;
Best Local Similarity 73.9%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY      87 GTGGATCGGGAGATGTGGCG 109
DB      35 GCGGATCGGCTGAATGGCG 13

RESULT 182
US-10-156-433-5
; Sequence 5, Application US/10156433
; Publication No. US2003014489A1
; GENERAL INFORMATION:
; APPLICANT: Burgin, Alex
; APPLICANT: Beigelman, Leonid
; APPLICANT: Bellon, Laurent
; APPLICANT: Zinnen, Shawn
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MHE00-943-E (500.007)
; CURRENT APPLICATION NUMBER: US/10/156,433
; CURRENT FILING DATE: 2002-05-28
; PRIOR APPLICATION NUMBER: US 10/112,814
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: US 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: US 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: US 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-156-433-5

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```

Query Match      2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      365  CGCCCTTCACGC 377
          |||||
DB       1  CGCCCTTCACGC 13

RESULT 183
US-10-156-433-6
; Sequence 6, Application US/10156433
; Publication No. US20030144489A1
; GENERAL INFORMATION:
; APPLICANT: Burgin, Alex
; APPLICANT: Beigelman, Leonid
; APPLICANT: Bellon, Laurent
; APPLICANT: Zinnen, Shawn
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MHB00-943-E (500.007)
; CURRENT APPLICATION NUMBER: US/10/156,433
; PRIOR FILING DATE: 2002-05-28
; PRIOR APPLICATION NUMBER: US 10/112,814
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: US 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: US 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: US 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-156-433-6

Query Match      2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      407  AGCTCTTCAGGGA 419
          |||||
DB       1  AGCTCTTCAGGGA 13

RESULT 184
US-10-156-433-8
; Sequence 8, Application US/10156433
; Publication No. US20030144489A1
; GENERAL INFORMATION:
; APPLICANT: Burgin, Alex
; APPLICANT: Beigelman, Leonid
; APPLICANT: Bellon, Laurent
; APPLICANT: Zinnen, Shawn
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MHB00-943-E (500.007)
; CURRENT APPLICATION NUMBER: US/10/156,433
; PRIOR FILING DATE: 2002-05-28
; PRIOR APPLICATION NUMBER: US 10/112,814
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: US 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: US 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: US 60/049,002

```

; PRIOR APPLICATION NUMBER: US 10/112,814
 ; PRIOR FILING DATE: 2002-03-29
 ; PRIOR APPLICATION NUMBER: US 09/216,584
 ; PRIOR FILING DATE: 1998-12-18
 ; PRIOR APPLICATION NUMBER: US 09/094,381
 ; PRIOR FILING DATE: 1998-06-09
 ; PRIOR APPLICATION NUMBER: US 60/068,212
 ; PRIOR FILING DATE: 1997-12-19
 ; PRIOR APPLICATION NUMBER: US 60/049,002
 ; PRIOR FILING DATE: 1997-06-09
 ; NUMBER OF SEQ ID NOS: 72
 ; SOFTWARE: Patent in version 3.1
 ; SEQ ID NO 10
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-10-156-433-10

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 47 TGAAGTACATCCA 59
 DB 1 TGAAGTACATCCA 13

RESULT 187
 US-10-156-433-11
 ; Sequence 11, Application US/10156433
 ; Publication No. US20030144489A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Burgin, Alex
 ; APPLICANT: Beigelman, Leonid
 ; APPLICANT: Bellon, Laurent
 ; APPLICANT: Zinnen, Shawn
 ; APPLICANT: Ribozyme Pharmaceuticals, Inc.
 ; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
 ; FILE REFERENCE: MBH00-943-E (500.007)
 ; CURRENT APPLICATION NUMBER: US/10/156,433
 ; CURRENT FILING DATE: 2002-05-28
 ; PRIOR APPLICATION NUMBER: US 10/112,814
 ; PRIOR FILING DATE: 2002-03-29
 ; PRIOR APPLICATION NUMBER: US 09/216,584
 ; PRIOR FILING DATE: 1998-12-18
 ; PRIOR APPLICATION NUMBER: US 09/094,381
 ; PRIOR FILING DATE: 1998-06-09
 ; PRIOR APPLICATION NUMBER: US 60/068,212
 ; PRIOR FILING DATE: 1997-12-19
 ; PRIOR APPLICATION NUMBER: US 60/049,002
 ; PRIOR FILING DATE: 1997-06-09
 ; NUMBER OF SEQ ID NOS: 72
 ; SOFTWARE: Patent in version 3.1
 ; SEQ ID NO 11
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-10-156-433-11

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 273 TGTGTCCACCTG 285
 DB 1 TGTGTCCACCTG 13

RESULT 188
 US-10-156-433-12
 ; Sequence 12, Application US/10156433
 ; Publication No. US20030144489A1
 ; GENERAL INFORMATION:

; APPLICANT: Burgin, Alex
 ; APPLICANT: Beigelman, Leonid
 ; APPLICANT: Bellon, Laurent
 ; APPLICANT: Zinnen, Shawn
 ; APPLICANT: Ribozyme Pharmaceuticals, Inc.
 ; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
 ; FILE REFERENCE: MBH00-943-E (500.007)
 ; CURRENT APPLICATION NUMBER: US/10/156,433
 ; CURRENT FILING DATE: 2002-05-28
 ; PRIOR APPLICATION NUMBER: US 10/112,814
 ; PRIOR FILING DATE: 2002-03-29
 ; PRIOR APPLICATION NUMBER: US 09/216,584
 ; PRIOR FILING DATE: 1998-12-18
 ; PRIOR APPLICATION NUMBER: US 09/094,381
 ; PRIOR FILING DATE: 1998-06-09
 ; PRIOR APPLICATION NUMBER: US 60/068,212
 ; PRIOR FILING DATE: 1997-12-19
 ; PRIOR APPLICATION NUMBER: US 60/049,002
 ; PRIOR FILING DATE: 1997-06-09
 ; NUMBER OF SEQ ID NOS: 72
 ; SOFTWARE: Patent in version 3.1
 ; SEQ ID NO 12
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-10-156-433-12

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 169 CCCGATCCAGCG 181
 DB 1 CCCGATCCAGCG 13

RESULT 189
 US-10-156-433-13
 ; Sequence 13, Application US/10156433
 ; Publication No. US20030144489A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Burgin, Alex
 ; APPLICANT: Beigelman, Leonid
 ; APPLICANT: Bellon, Laurent
 ; APPLICANT: Zinnen, Shawn
 ; APPLICANT: Ribozyme Pharmaceuticals, Inc.
 ; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
 ; FILE REFERENCE: MBH00-943-E (500.007)
 ; CURRENT APPLICATION NUMBER: US/10/156,433
 ; CURRENT FILING DATE: 2002-05-28
 ; PRIOR APPLICATION NUMBER: US 10/112,814
 ; PRIOR FILING DATE: 2002-03-29
 ; PRIOR APPLICATION NUMBER: US 09/216,584
 ; PRIOR FILING DATE: 1998-12-18
 ; PRIOR APPLICATION NUMBER: US 09/094,381
 ; PRIOR FILING DATE: 1998-06-09
 ; PRIOR APPLICATION NUMBER: US 60/068,212
 ; PRIOR FILING DATE: 1997-12-19
 ; PRIOR APPLICATION NUMBER: US 60/049,002
 ; PRIOR FILING DATE: 1997-06-09
 ; NUMBER OF SEQ ID NOS: 72
 ; SOFTWARE: Patent in version 3.1
 ; SEQ ID NO 13
 ; LENGTH: 13
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-10-156-433-13

Query Match 2.1%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 561 CTGGATCCAGGAT 573

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Db          1 CTGGATCCAGAT 13
          |||||
RESULT 190
US-10-112-814-5
; Sequence 5, Application US/10112814
; Publication No. US20030170644A1
; GENERAL INFORMATION:
; APPLICANT: Alex, Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Bellon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-943-D; 400.005
; CURRENT APPLICATION NUMBER: US/10/112,814
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-10-112-814-5

Query Match          2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          365 CGCCCTTCACGCG 377
          |||||
Db          1 CGCCCTTCACGCG 13
          |||||
RESULT 191
US-10-112-814-6
; Sequence 6, Application US/10112814
; Publication No. US20030170644A1
; GENERAL INFORMATION:
; APPLICANT: Alex, Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Bellon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-943-D; 400.005
; CURRENT APPLICATION NUMBER: US/10/112,814
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-10-112-814-6

Query Match          2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          365 CGCCCTTCACGCG 377
          |||||
Db          1 CGCCCTTCACGCG 13
          |||||
RESULT 192
US-10-112-814-8
; Sequence 8, Application US/10112814
; Publication No. US20030170644A1
; GENERAL INFORMATION:
; APPLICANT: Alex, Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Bellon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-943-D; 400.005
; CURRENT APPLICATION NUMBER: US/10/112,814
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-10-112-814-8

Query Match          2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          533 CTGAGTACCTGAA 545
          |||||
Db          1 CTGAGTACCTGAA 13
          |||||
RESULT 193
US-10-112-814-9
; Sequence 9, Application US/10112814
; Publication No. US20030170644A1
; GENERAL INFORMATION:
; APPLICANT: Alex, Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Bellon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-943-D; 400.005
; CURRENT APPLICATION NUMBER: US/10/112,814
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-10-112-814-9

Query Match          2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          533 CTGAGTACCTGAA 545
          |||||
Db          1 CTGAGTACCTGAA 13
          |||||
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US-10-112-814-6
Query Match          2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          407 AGCTCTTCAGGGA 419
          |||||
Db          1 AGCTCTTCAGGGA 13
          |||||
RESULT 192
US-10-112-814-8
; Sequence 8, Application US/10112814
; Publication No. US20030170644A1
; GENERAL INFORMATION:
; APPLICANT: Alex, Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Bellon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-943-D; 400.005
; CURRENT APPLICATION NUMBER: US/10/112,814
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-10-112-814-8

Query Match          2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          533 CTGAGTACCTGAA 545
          |||||
Db          1 CTGAGTACCTGAA 13
          |||||
RESULT 193
US-10-112-814-9
; Sequence 9, Application US/10112814
; Publication No. US20030170644A1
; GENERAL INFORMATION:
; APPLICANT: Alex, Burgin
; APPLICANT: Leonid, Beigelman
; APPLICANT: Laurent, Bellon
; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-943-D; 400.005
; CURRENT APPLICATION NUMBER: US/10/112,814
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-10-112-814-9

Query Match          2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          533 CTGAGTACCTGAA 545
          |||||
Db          1 CTGAGTACCTGAA 13
          |||||
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; TITLE OF INVENTION: Method for Screening Nucleic Acid Catalysts
; FILE REFERENCE: MBH00-943-D; 400.005
; CURRENT APPLICATION NUMBER: US/10/112,814
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: 09/216,584
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 09/094,381
; PRIOR FILING DATE: 1998-06-09
; PRIOR APPLICATION NUMBER: 60/068,212
; PRIOR FILING DATE: 1997-12-19
; PRIOR APPLICATION NUMBER: 60/049,002
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 13
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; OTHER INFORMATION: Accessible site within Bcl-2 transcript
US-10-112-814-13

Query Match 2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 561 CTGGATCCAGGAT 573
Db 1 CTGGATCCAGGAT 13
|||||

RESULT 198

US-10-714-310-13/c
; Sequence 13, Application US/10714310
; Publication No. US20040152654A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Zhidong
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Prakash, Ramesh
; APPLICANT: Koehn, Richard
; TITLE OF INVENTION: Inhibitory Oligonucleotides Targeted to Bcl-2
; FILE REFERENCE: 12475/50102
; CURRENT APPLICATION NUMBER: US/10/714,310
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: US 60/426,269
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 13
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-310-13

Query Match 2.1%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 367 CCCTTCACCGCGC 379
Db 13 CCCTTCACCGCGC 1
|||||

RESULT 199

US-10-076-047A-177
; Sequence 177, Application US/10076047A
; Publication No. US20030152935A1
; GENERAL INFORMATION:
; APPLICANT: Herath, Herath Mudiyansele Athula Chandrasiri
; TITLE OF INVENTION: Proteins, Genes and Their Use for
; TITLE OF INVENTION: Diagnosis and Treatment of Breast Cancer
; FILE REFERENCE: 2543-1-026

; CURRENT APPLICATION NUMBER: US/10/076,047A
; CURRENT FILING DATE: 2002-02-13
; PRIOR APPLICATION NUMBER: GB 9919258.5
; PRIOR FILING DATE: 1999-08-13
; PRIOR APPLICATION NUMBER: GB 0007754.5
; PRIOR FILING DATE: 2000-03-30
; PRIOR APPLICATION NUMBER: PCT/GB00/03143
; PRIOR FILING DATE: 2000-08-14
; NUMBER OF SEQ ID NOS: 351
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 177
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-076-047A-177

Query Match 2.0%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 397 GTGGTGGAGGAG 408
Db 1 GTGGTGGAGGAG 12
|||||

RESULT 200

US-10-076-047A-255/c
; Sequence 255, Application US/10076047A
; Publication No. US20030152935A1
; GENERAL INFORMATION:
; APPLICANT: Herath, Herath Mudiyansele Athula Chandrasiri
; TITLE OF INVENTION: Proteins, Genes and Their Use for
; TITLE OF INVENTION: Diagnosis and Treatment of Breast Cancer
; FILE REFERENCE: 2543-1-026
; CURRENT APPLICATION NUMBER: US/10/076,047A
; CURRENT FILING DATE: 2002-02-13
; PRIOR APPLICATION NUMBER: GB 9919258.5
; PRIOR FILING DATE: 1999-08-13
; PRIOR APPLICATION NUMBER: GB 0007754.5
; PRIOR FILING DATE: 2000-03-30
; PRIOR APPLICATION NUMBER: PCT/GB00/03143
; PRIOR FILING DATE: 2000-08-14
; NUMBER OF SEQ ID NOS: 351
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 255
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-076-047A-255

Query Match 2.0%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 558 CACCTGGATCCA 569
Db 12 CACCTGGATCCA 1
|||||

Search completed: September 22, 2004, 08:58:48
Job time : 2 secs

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